

**Technology Investment Decision Making:  
An Integrated Analysis in UK Internet  
Banking**

**APPENDIX**

*CONFIDENTIAL*

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# **A.1 – Discussion of processes in conducting and analysing interviews.**

## **Introduction**

This Appendix comprises two volumes which include the original transcripts of the 30 interviews conducted from January 2001 until June 2004 as the core part of the empirical work. Documentary supporting evidence that was occasionally provided by some interviewees was excluded from this work altogether due to their strictly confidential nature and following relevant requests from the firms and individuals who kindly offered them. The present volume includes (1) a discussion related to carrying out the empirical work and (2) the transcripts of the interviews from the two *primary* cases (Royal Bank of Scotland and Intelligent Finance).

The present discussion addresses how the empirical work was carried out throughout, from the selection of the sample to the closure of the empirical research and the analysis of results. In that process, this discussion first provides a statistical overview of the sample and clarifications on the particular choices about the chosen number of interviews and why the particular interviewees were involved. It continues by explaining the overall mechanics of the interviewing process, with particular reference to feedback loops established between the interviewer and the respondents and the technical aspects of recording the interviews. A brief account of the methodologies for processing interviews data follows. The discussion closes with a review of limitations of this particular approach to empirical research as well as issues that had to be addressed and resolved during the work.

The second and main part of this Volume provides transcripts of the interviews. For obvious reasons, interviews involving people from the same firm are presented sequentially. This layout is useful in giving the reader a company-centred view of the empirical work; other perspectives - especially useful - such as an expertise-centred one are discussed in the respective chapter addressing a discussion of results.

As the research is primarily addressing a sensitive area of the banking industry, the information (both oral and documented) provided by the interviewed parties is of confidential nature. This is further imposed by the fact that the focus of this research is on current processes and - more importantly - practices of investment valuation in real-world companies, which are naturally reluctant to disclose sensitive information on their strategies. It is therefore almost by definition that the empirical part of this thesis is treated as sensitive and confidential. To respond to that need, the interview transcripts and relevant documentation in the two Appendix volumes are provided as separate from the core thesis written work and suitably marked as confidential.

## Selection of the sample and closure

For the purpose of the empirical investigation, 12 organisations were contacted. Two of these (Rothschild and WM Company (now StateSreet)) were used as sources of supplementary information, while the remaining 10 were directly involved in Internet Banking implementation. Of the 10 Internet Banking implementers, two were investigated in more depth and constituted the *primary cases*. The remaining eight were addressed through fewer contacts (occasionally a single interview) as they were used as *secondary cases*. A summary of the firms and numbers of interviews are provided in Table A.1 below:

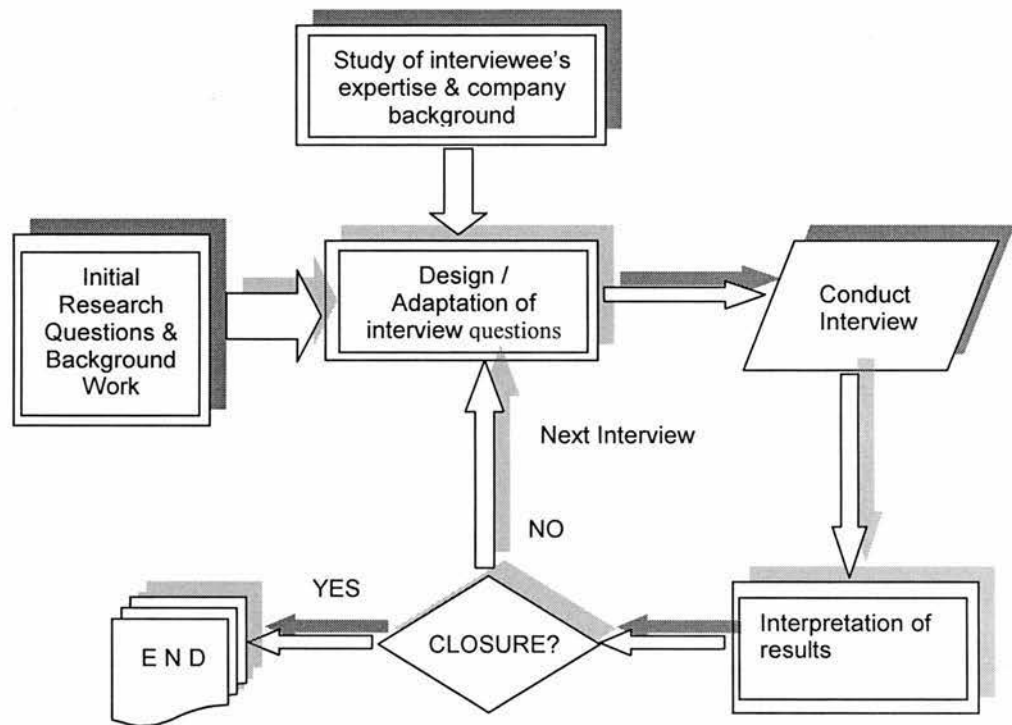
**Table A.1: Participating companies, number of interviews per company and their Internet Banking entry mode (where applicable). Greyed rows indicate the primary cases).**

Company Name	Reference Code	Number of interviews	E-banking entry
Rothschild	1	1	N/A
RBS Group	2	9	Incumbent
Goldfish	3	2	Unrelated
HBOS	4	2	Incumbent
Egg	5	3	Related
Tesco Personal Finance	6	2	Unrelated
Societe Generale	7	1	Incumbent
Standard Life Bank	8	2	Incumbent
Abbey National / Cahoot	9	1	Related
Intelligent Finance	10	5	Related
Virgin One	11	1	Unrelated
WM Company	12	1	N/A
<b>TOTAL</b>		<b>30</b>	

The 10 Internet Banking implementers were chosen on the basis of the following criteria:

1. The overall balance between incumbents (4), related entrants (3) and unrelated entrants (3).
2. Choice of the primary cases was made on the basis of reputation as highly successful financial institutions at the time of the interviews. That choice was equally facilitated by the strong local presence of both the chosen banks (RBSG and IF) in the Edinburgh area, which allowed for easy face-to-face access to interviewees.
3. Access to individuals in the firms. The contribution of the University of Edinburgh Management School Alumni network has proved crucial in providing contacts and encouraging interviewees to participate in the research.
4. The available breadth of specialisations among the contacted managers. The ultimate list of participants was developed from a much wider list of potential candidates on the basis of their positions and expertise.

Choice of the number of firms to be investigated, and the number of interviews to be conducted was not prescribed but defined dynamically. Furthermore, in this particular research, the use of the outrigger model further necessitated a choice as regards the number of primary and secondary cases. Naturally, in practice, no optimal number can be defined for either the case studies or the interviews themselves; these numbers largely depend on the investigated subject, the nature of the research and the required amount of detail deemed necessary for adequately addressing it. Figure A.1 illustrates a broad view of the process that was followed when conducting the empirical research.



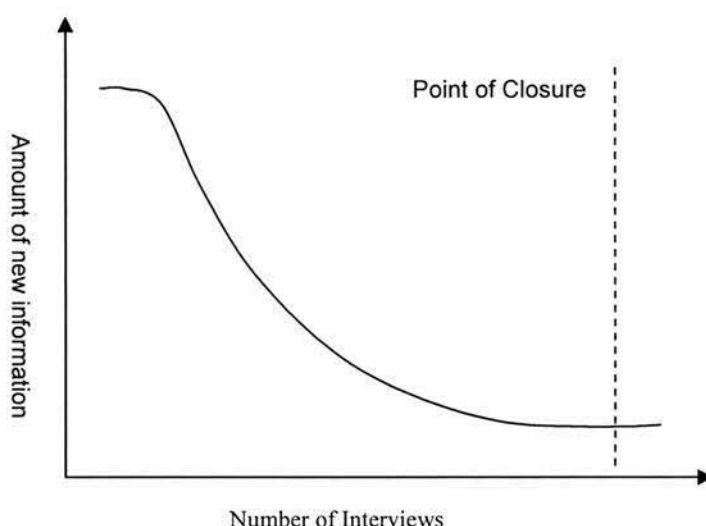
**Figure A.1: The process for designing and optimising the interviews (Adapted from Fig. 3.1).**

The demonstrated mechanism works in two ways:

1. It provides a way for deciding when interviewing should stop, on the basis of whether closure has been achieved, and
2. It offers a high-level description of how interview questions are adjusted and interviewing skills evolve from one interview to the next.

A generic rule of thumb for deciding when closure is reached is to cease interviewing when the amount of new relevant information obtained by an interview is minimal compared to what has already been obtained. Figure A.2 illustrates this rule.

New information, of course, is always provided through the investigation of an organisation that was not included in the original sample, or by interviewing an individual who happens to have distinctive opinions. However, because this research is relying on information only to the extent that the themes of interest are ascertained by individuals, volume of data is rather unimportant. In that regard, closure was relevant to the process followed for developing the thematic entities by which the interview analysis was ultimately performed. That process is explained in detail in the relevant section later in this text (see 'From Initial Research Questions to Thematic Analysis of Findings'): when interviewing should conclude depended, among other things, on when a final set of themes was developed.



**Figure A.2: The diminishing levels of new information provided by each new interview. Closure is reached when any new interview adds minimal amounts of information that is of interest for the investigation.**

With regard to choosing the participants themselves, it was ensured that an adequate variety of backgrounds and specialisations is covered, to address the element of *expertise*, which was key for both the theoretical framework and empirical analysis. Although covering the full spectrum of experts in cases like this is not feasible, especially due to the proliferation of specialisations, interviewees came from a variety of job descriptions and specialities. These are briefly outlined in Table A.2 by company code (see Table A.1) where the separation between *financial* and *non-financial* expertise is also made. That was an initial separation used to locate disparities between the two categories.

In addition, as Fig. A.3 demonstrates, interviews did not cover each company at once, but rather addressed the same firm through chronologically distant interviews. This practice allowed for more uniform build-up of experience in interview design. It therefore

ensured that interviews from the same company are dispersed in time to take advantage of improved interviewing skills that developed at late stages of the process.

**Table A.2: List of interviews by company code and expertise ('F' for Financial, 'NF' for Non-Financial).**

	POSITION	CODE	DATE(S)	Expertise
1	Retail Strategy Manager	9	21/12/2002	NF
2	Head of Commercial Management, Digital Distribution	5	04/07/2002	F
3	Head of Commercial Management, Digital Distribution	5	25/10/2002	-
4	Finance Team	5	17/03/2003	F
5	Finance Director	3	22/05/2002	F
6	Manager of IT Finance	3	21/06/2002	F
7	Associate Director of Corp. Banking	4	10/06/2002	F
8	Associate Director, Knowledge Management, Corp. Banking	4	19/06/2002	F
9	Finance Director	10	04/02/2003	F
10	IT & Business Design Director	10	17/02/2003	NF
11	Head of Applications Development	10	06/03/2003	NF
12	Former Head of Business Design - Head of Sales & Service	10	21/05/2003	NF
13	Change Management	10	22/08/2003	F
14	Head of Strategy & Research – E-commerce & Internet	2	23/12/2001	F
15	Former Retail Banking Director	2	29/05/2002	F
16	Decision Support Manager - Retail Finance	2	12/06/2002	F
17	Head of Strategy & Research – E-commerce & Internet	2	28/06/2002	-
18	IT Security Consultant (previously)	2	03/10/2002	NF
19	Retail Finance - Investment Appraisal	2	10/10/2002	F
20	IT e-commerce Investment Appraisal	2	15/11/2002	F & NF
21	Retail Direct Strategy and Planning	2	18/11/2002	NF
22	MIS - Group Finance	2	16/04/2003	NF
23	Investment Banker	1	23/03/2001	F
24	Business Analyst	7	25/10/2002	NF
25	E-commerce Development	8	18/11/2002	NF
26	E-commerce Development	8	05/03/2003	-
27	Store Marketing Manager	6	09/07/2002	NF
28	Credit & Risk	6	13/02/2003	F
29	Internet Sales	11	18/02/2003	NF
30	Technology Director	12	01/06/2004	NF



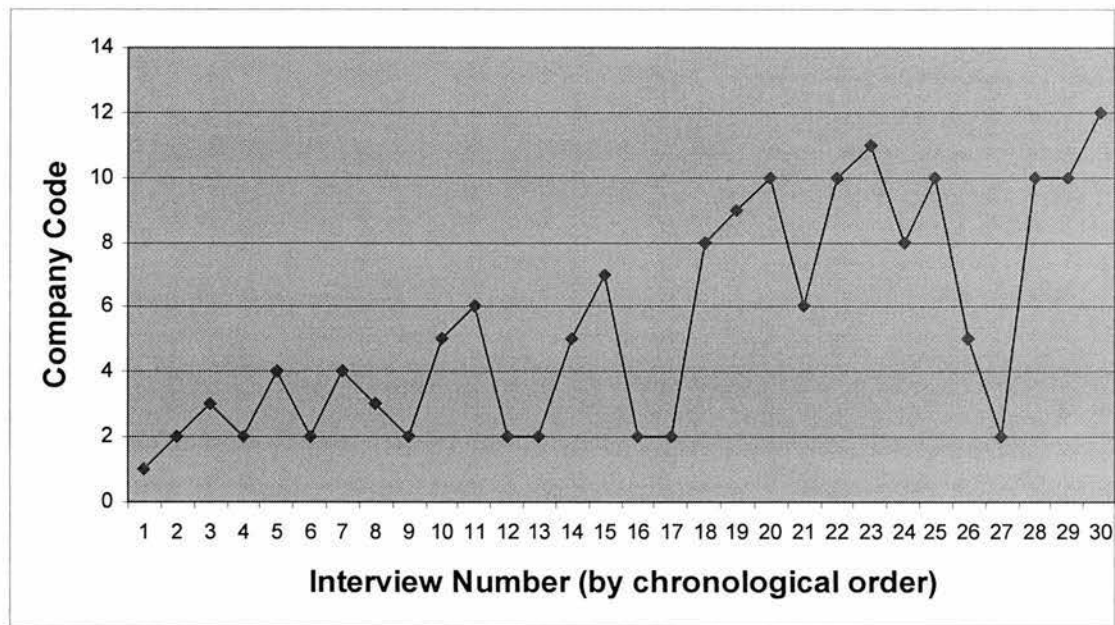


Figure A.3: The chronological order of interviews by Company Code

### ***Interviews' implementation process***

The process of completing each interview involves a number of stages, prior to and after the actual interview is completed. These stages are briefly outlined below:

1. Deciding that the interviewee is a suitable candidate. Although that was less important at the starting phase of the research, it became more relevant at later stages where getting interviews from managers of different expertise was essential.
2. Contacting the candidate interviewee via telephone or email to establish rapport and request for his or her involvement. There were several instances where access was refused, either directly, or following consultation of the candidate with his or her superiors.
3. Once communication is established (by phone or email), the prospective interviewee is issued an email message signed with the interviewer's name, position and contact details where the following details are provided:
  - a) The interviewer's background.
  - b) The specific aims and scope of the research.
  - c) A brief account of the method (semi-structured interviews).
  - d) An indication of the interview's scope and duration.
  - e) A request for tape-recording.



- f) Reassurance of confidentiality and use of the material for research-only purpose.
- g) A request for documentation (mainly to allow time for the interviewee to think of appropriate sources).
- h) A Word attachment with a 2-page briefing paper on the research
- i) The assurance for access to research results, once work is completed.

4. Designing the interview follows. The process is described below:

- a) Any publicly available documentation is gathered on the interviewee's company as a primary source of potentially useful information. This material may be subsequently used during the interview to prompt the respondent to examples of his company activities; it also proves very useful for appearing knowledgeable to the interviewee as well as setting grounds of common reference when he speaks about specific projects in his company.
- b) The actual design of the interview is now made. This is primarily based on a framework derived by initial interviews (i.e. the first 2-3 interviews carried out) where the researcher starts by simply outlining the areas of interest, turning them into relevant questions. This framework is finalised following a number of iterations of the starting design towards fitting a more coherent flow of the interview discussion: this has been achieved by examining which areas of discussion fit together, to avoid unconnected leaps between issues, as this would put-off and confuse the respondent. Designing a specific interview begins by gearing the aforementioned framework to the context of (1) the firm and its strategies, expertise, position etc, (2) the interviewee's position and responsibilities (if known in advance), (3) any particularities identified while studying the background material.

5. Carrying out the interview. A number of issues have drawn attention at that stage. These are outlined here:

- a) Recording equipment was tried and tested before each interview (see "Technical Aspects" node for details). That was essential to avoid any problems such as low battery levels or poor sound quality.
- b) At the beginning of the interview, rapport was established through providing the interviewer's background and recording that of the interviewee: the benefit of doing so is that interviewees' stances and assumptions are influenced by their background; in taking account of this (and appropriately commenting on it) it was made easier to recognise any bias built in their replies and identify similarities between the stances of people from similar backgrounds.

- c) During the interview, the interviewee was allowed to drive the discussion and was prompted where it was found appropriate: the value of following this approach is multiple: (1) it provides a sense of comfort to the interviewee, similar to that of an informal discussion, (2) it allows the interviewee to raise issues that may have not been included in the original interview design, which can then be followed through later on, (3) it may (as it has in several cases) lead the interviewee to answer questions without being prompted to do so, leading to more genuine replies.
  - d) At the end of each interview, respondents were asked to contribute:
    - i. Recommendations about issues they thought pertinent to the subject, and which I am failing to address.
    - ii. Documentation on the formal processes for TIDM in their firm.
    - iii. Names and contacts of managers in their firm that they believed would be useful to talk to
6. Contacting the interviewees after the interview to thank them, reassure of the promised confidentiality, promise to send the transcript for comments and potential corrections.
  7. Transcription: This involves the recording of the interview in Word document format; care is taken so that the transcript is as accurate as possible and so that it incorporates aspects of the spoken language like pauses, unfinished sentences etc. The value of recording these aspects lies in that it helps to somehow interpret the state of mind of the respondent when trying to answer a specific question. Long pauses for example may indicate either reluctance or that they have not considered the question in the past and simply tries to either avoid giving a clear response, or give a satisfactory reply.
  8. Clarifying incomprehensible words or sentences: There have been several cases where words, or even sentences, were difficult to make out, either because of poor sound quality, or low tone of voice. Additional problems occurred when jargon expressions or acronyms were used. To unpack these, it was necessary to either resort to assistance from native speakers or to the interviewee's assistance through email.
  9. Completing interviews that were unfinished because of either urgent events, or lack of time was also necessary in a couple of cases. In these, follow up phone calls or email was used.
  10. Having finalised the transcription, the Word file was sent to the interviewees (on email at all cases) with a request that they go through it and verify that they agree to it and no misinterpretation was made. They were also requested to highlight, change or discard anything that they changed their mind about saying in the interview.

11. After having verified the transcript with the interviewee, changes were implemented. This finalised the process.

## ***From Initial Research Questions to Thematic Analysis of Findings.***

This section discusses how the overall design of the empirical research was performed to deliver the final analysis provided in chapter 7. This concerns both the process of how the actual interview questions evolved, and the sequence of adaptations that started from the initial research questions and ultimately provided the six generic thematic entities. Initiation of the empirical research was made after the subject matter of the investigation was defined and the generic research questions were decided. That was largely the outcome of two parallel processes:

1. Preliminary literature review, where both academic and trade journals were scanned with regard to identifying prominent issues in TIDM and the introduction of Internet Banking in the UK.
2. Conducting of initial interviews in order to gain access to insider opinions. This was especially valuable because these opinions are informed in different ways than publicly available documents; what practitioners consider as pertinent is not necessarily reflected in the academic or trade literatures.

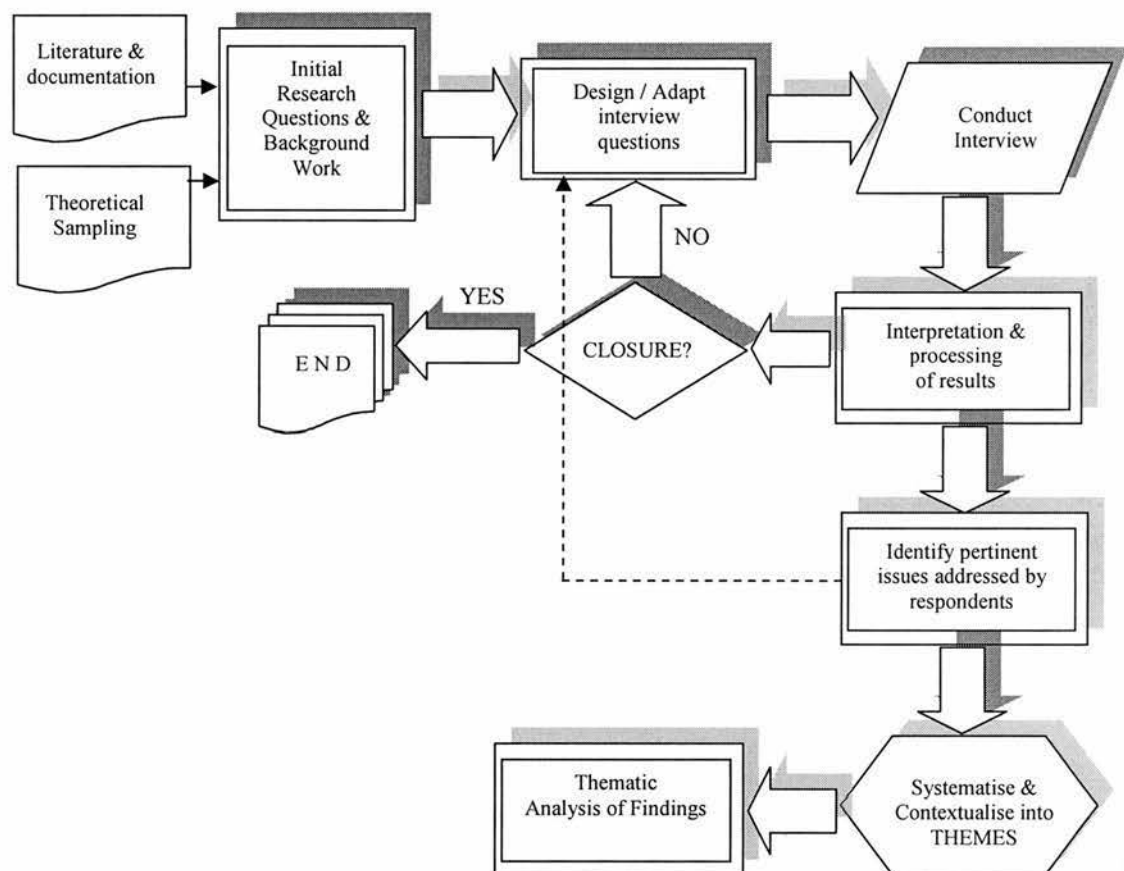
The set of research questions that was developed through that initial stage is provided in the table below. Of these, three were identified to be closer to the basic propositions that the research addresses (questions (1), (6) and (8) in Table A.2) while the remaining five were seen as ancillary to addressing the three basic ones. Naturally, ancillary research questions addressed rather specific issues that were identified both in the literature and the initial interviews as problematic and important for discussing the basic ones.

**Table A.3: The initial research questions as developed through literature review and theoretical sampling. Basic research questions are highlighted in grey background.**

	RESEARCH QUESTION	TYPE
(1)	Is there specific treatment in the appraisal of technology projects, as opposed to other projects in the financial services sector?	BASIC
(2)	What are the most common approaches to investment appraisal of technology among firms in the UK financial sector?	ANCILLARY
(3)	Is there any formal mechanism for post-implementation assessment of such decisions in these firms?	ANCILLARY
(4)	Which are, if any, the most important IT-related aspects that are omitted in such investment decisions?	ANCILLARY
(5)	Are there any firm or sector-specific elements that play a decisive role in how these firms treat IT projects?	ANCILLARY

(6)	What is the relation between investment appraisal processes and final decision-making?	BASIC
(7)	Is the incidence of many e-business failures affecting the treatment of the appraisal process in electronic financial services for firms?	ANCILLARY
(8)	Which are, if any, the differences between the theoretical treatment of investment appraisal and the practical perceptions and usage of it?	BASIC

The process then involved the conduct of further interviews. Each one effectively represents a step in an iterative sequence where (1) the actual interview questions and the areas of focus in interview cues was adjusted to incorporate knowledge obtained from previous instances, and (2) a list of issues that interviewees considered to be pertinent in the TIDM process was developed and extended. This iterative process is depicted in Figure A.3. below. The same diagram was provided in Figure 7.1.



**Figure A.4: The detailed structure of design and optimisation of interviews (Adapted from Figure 7.1.)**

The process described above was used to derive the final thematic entities from the initial research questions. This transformation was gradually performed by informing each interview with findings from previous ones on the basis of the issues that respondents chose

to address as most important in their discussion of the TIDM problem. Once an adequate number of interviews were carried out (approximately 16-18), themes were made more visible as the generic guidelines for discussing the problem. These were verified during the remaining of the interviews, until closure was reached.

A list of the resulting themes is provided in Table A.3 below. Table 7.1 provides a more analytical account that also includes conclusions from the relevant analysis.

**Table A.4: Brief list of themes identified on the basis of initial research questions and interview evidence.**

#	GENERAL THEMATIC ENTITY
1.	Establishment of TIDM processes and their applicability
2.	the perceived importance of technological implementation
3.	The development and dynamics of expert groups
4.	Organisational structure and built-in hierarchies for decision-making
5.	The influence of wider economic cycles
6.	The role of knowledge and learning in TIDM

The development of the six themes from the initial research questions is the outcome of how our knowledge of the subject evolved throughout the research. Initial research questions were set by beginning from initial impressions about the TIDM problem, as these were formulated through the preliminary literature review. These initial research questions were largely conceptualisations of the viewpoints and criticisms available in the academic and trade literature. They were used in that capacity to initiate the empirical investigation as a way for establishing common grounds of understanding with interviewed managers and tease-out their own informed viewpoints. In light of interview material, impressions about the TIDM problem evolved by shifting focus from the problematic expressed in the literature, to that revealed throughout the empirical investigation: whereas initial impressions were centred to the deficiencies of established methodologies in fully assessing technology, the actual problem that resonated in interviews was that of the unconventional use of techniques and the political nature of TIDM. To refer back to Table A.2, effectively, research question (6) became the central point of attention and therefore had to be unpacked to reveal the reasons behind the process – practice disparities. That transformation was performed gradually, since each new interview offered new contributions to that subject. In that process, the remaining initial research questions became less relevant, at least in the form they were originally posed.

The actual formulation of the specific themes illustrated in Table A.3 was performed by gradually focusing on areas that (1) were observed as the ones most often mentioned as important in TIDM and how it is performed in interviewees' organisations and (2) were identified by analysis as ones that highly influence different experts' viewpoints on TIDM.

That analysis was made by organising interview data by relevant headings, as Table A.4 in the next section illustrates. Because that evolutionary process was implicit, and because the way that a research problem is formulated is always contingent to the researcher's viewpoints, approaches and background, there is no clear mechanistic way for accurately describing the exact stages of transition from initial research questions to themes. It is reasonable to assume that the six themes that were identified here do not constitute the only possible categorisation; however, that was seen to be very effective in making coherent sense of the empirical data with view to addressing the TIDM problem.

## ***Results Processing and Analysis***

The present section looks at the technical aspects of processing interview transcripts in order to analyse them. The process is briefly described and commented below:

1. A document containing all the interviews, sorted by company was compiled, which was examined initially without specific focus (i.e. not having a specific research question in mind) to get the look and feel of what happened, remember the setting of the interview and the conditions under which it took place. At this stage a first annotation with general comments and observations was made, including any particularities in the tone of voice of the respondent, any observed reluctance or difficulty to discuss specific issues etc. Having read all the interviews, and drawing on the available documentation, a full understanding of the overall events and the available data was obtained.
2. Having completed the first step, a matrix was drawn in Microsoft Excel, using the research questions as columns and the interviews as rows. The idea is that, at the end of the process, the corresponding boxes in the matrix contain comments about what each interviewee said about each of the research questions. The number of column titles (i.e. the headings used to denote issues that the interviewees addressed have) has been changing in nearly every interview to accommodate new issues as they arose. These headings remained relatively stable after analysing approximately 60% of the interviews. A list of the final headings is provided in Table A.4 below. It is noted that no use of dedicated software for qualitative data analysis (NVIVO, Nudist etc.) was made. The reasons for this choice were that (1) high familiarity with standard tools (like MS Excel and MS Word) allowed for comfortable manipulation, search, colour-coding and note-taking and (2) given that no particular usefulness was identified for using other software utilities, it was thought that the time needed to go through the learning curve for new software could be more efficiently employed in actual data analysis.



3. At this stage, a second pass is done to zoom into each of the areas of interest (as they developed through the first pass), and document additional issues raised by the interviewee. The matrix was continuously revisited and new columns added where appropriate, comments added and information from previous interviews relocated under suitable headings.

**Table A.5: Area headings used in interview analysis**

#	Covered Areas
1	Roles of interviewees
2	overall view on IA & TIDM
3	TIDM as opposed to other investment
4	Role of technology
5	Technology as tool for financial engineering
6	Role of Finance in project appraisal
7	Role of power
8	Process of project approval
9	Assumptions in Internet Banking valuation and Investment Appraisal
10	Valuation aspects – elements
11	Role of financial & business cases in Internet Banking
12	Extent of use of advanced methods (ROV etc.)
13	Technology Budget structure
14	Valuation of Tangibles and Intangibles
15	Valuation of intangibles
16	Unanticipated costs and benefits
17	Identification & measurement of costs and benefits
18	How uncertainty is treated in Investment Appraisal
19	Short-termism
20	Role of the economic cycle in valuation processes
21	Competition with new entrants
22	Role of Investment Appraisal methods
23	Dealing with conflict of Finance vs. Strategy
24	Overall balance between Investment Appraisal and Strategy
25	Knowledge assets – Knowledge Management
26	Post-Implementation Reviews (PIR)
27	Traditional banking vs. IT expertise
28	Expertise development
29	Additional comments on expertise
30	Reporting as driver for appraisal of new technology
31	Propensity to use sophisticated techniques
32	Change in Investment Appraisal perceptions prior and after the dot-com bust.
33	Areas that I have not covered in the interview
34	Opinions on the future of banking

35	Role of Internet Banking in shaping the organization and the industry
36	Cannibalisation of customer base and ho it is treated
37	The role of Account Aggregators
38	Perceptions of banks on security
39	Cost implications from security demands
40	Evaluation of security
41	Models of E-commerce in Banking
42	Banks Regulation
43	ISPs relationship with the banks

4. The next stage of the approach involves focusing on the resulting matrix with a view to aggregating interviews' results; this part includes revisiting the interviews for pinpointing issues that were previously uncommented, and which may have become of more value as the research understanding of the problem developed.
5. Based on what was performed in the previous stages, the headings mentioned in Table A.4 were gradually condensed into the themes of Table A.3. That was *not* the result of any grouping of headings into themes as there is no one-to-one correspondence between themes and the areas that headings covered. It should be noted that theme development was happening simultaneously with the interviewing process and was informed by the preliminary analysis based on the headings of Table A.4. In that sense, translation from headings to themes has been an implicit transmutation from areas that were broadly visible in the interviews to expressions that make sense of the subject in the terms of the chosen theoretical framework.

### ***Technical aspects - recording equipment and backup***

Addressing the technical contingencies for recording the interviews on tape plays quite an important role in the overall process. The obvious reason is that, if it is not ensured that equipment is fully functional and recording quality is adequate, the time overheads for recovering poor sound are huge: whereas, under normal conditions, the time taken for transcribing 10 mins of tape is approximately 1 hour (a ratio of 1/6), the effort involved in recovering sound and transcribing from there is a multiple of that. In the case of this research a number of recording media were used before resorting to the final setting.

For the purpose of recording interviews, the following pieces of equipment were used. These were replaced in the order provided mainly because of technical deficiencies or incompatibilities.



1. Philips interview mini-tape recorder with embedded microphone: Although recording was of satisfactory quality, the following problems necessitated its replacement with more standard devices:
  - a. The length of tape was a problem, as each side allowed a maximum of 20 minutes long recording. That caused inconvenience during the interviews, as the interviewees had to be interrupted several times during one interview to change tapes.
  - b. The format of tape was different than other brands of mini tape recorders and therefore finding blank tapes in the market proved extremely difficult.

Interviews made with this equipment were transferred to regular magnetic tape.

2. Sony minidisk with microphone input jack. That was the best efficient solution because of:
  - a. High quality of sound (with the use of a table-top microphone)
  - b. Digital media storage
  - c. Ability to transfer & store to other digital media (PC)This equipment was discontinued because of unrecoverable damage.
3. Sony minidisk without microphone input jack. It was Used for two interviews and later discontinued due to low sound levels.
4. Sony magnetic tape recorder with table-top microphone. This has been the most stable solution because it ensured acceptable quality of sound, it was easily operable and the outputs (magnetic tape) were then transferred to minidisk (digital) for storage. This last option was used for most of the interviews.

Creating backup copies of interviews was found extremely important, even after interviews were transcribed. A backup process was therefore adopted from the early stages of interviewing. In that process, the content of magnetic tapes was transferred on minidisk by connecting the headphones (output) of the magnetic tape recorder to the input socket of the minidisk: The two devices were then simultaneously started by activating the 'play' function on the tape recorder and the 'record' function on the minidisk.

## **A.2 – Interview Transcripts**

### **1. The Royal Bank of Scotland Group**

### 1.1. Telephone interview, 21/12/2001

1. **Thank you very much for accepting to talk to me. Since we never met before, maybe it would be useful for me to introduce myself and then move on to the discussion. As you already know, I'm currently doing my PhD; the title of my PhD is "Investment Appraisal for electronic banking in the UK". I am an electrical engineer originally; I've worked as a telecoms engineer for 2 years in Greece, and I took my MBA in EUMS. So I'm effectively continuing my academic studies with my PhD. So would you like to start by telling me a few things about yourself? Your own background?**
2. Yes, surely; I'm head of Strategy in the e-commerce division here in Royal Bank; I've been in banking for almost 30 years now; I've seen most things, but in recent years I specialised as a product manager and had pretty heavy involvement in e-banking, both on the business side and on the retail side, I suppose, for the best of the last 10 years. I remember sitting behind the 2-way mirror in IBM's development labs in North London back in 1987, when we first put together BankLine - which was our initial business-focused offering - and seeing the first guinea pigs get the disks out of the box, and trying to get the green text up on the blank screen;
3. **How did that take on?**
4. Well, initially of course, it was very slow, because we tend to introduce things as soon as the technology has become reasonably stable; but that doesn't mean that everyone wants to rush forward and make use of them. So, the growth of e-banking - and I'll just talk a bit about the commercial sector of the service - because that's of course where we started -, growth in the first instance was relatively modest; I can't honestly remember what our first year target was, but it was certainly less than 100 customers; now these days were taking on probably 300 customers a month for the commercial product -it's much more than that for the consumer product - and it has become an everyday part of life; but that certainly wasn't the case in the first instance. And I think that's fairly typical of technology take-up; if you think about the way which mobile telephones went 10 years or so ago; a very few people were carrying around very heavy devices, which by and large you could really only justify if you had it fitted in your car; Nowadays, I'm not quite sure what the penetration of mobile phones is; but it's very high indeed; and of course it went through a very rapid take-up in the last couple of years. And that's the kind of trend we expect to get in most of the technology-based things that we launch.
5. **I couldn't fail to notice that first of all, the Royal Bank of Scotland has an E-commerce and Internet division and a Research and Strategy dept of which you are the Head. Could you tell me a few things about this division; how and when it was settled?**
6. It was put in place immediately after RBS bought-out Natwest, so it's been in place for about 2 years now. It was a deliberate thing to keep it separate; you probably noticed the fact that RBS is quite well diversified; we operate under a lot of different brands, and what we wanted to do was to have a centre of expertise which could look across all of these brands and not necessarily run all of those services, but at least provide some advisory overview and make sure that best practices which we have learned in one division can be transferred into another. We've actually got quite a number of e-banking offerings; We've not only got the main brands like RBS and Natwest; we've also got for example Coots, Tesco Personal Finance is another example, Virgin Direct as an electronic distribution channel, and as I said what we try and do is to take the best parts of each one and at least make sure

that they're known to the other parts of the group, so that they can build on their experience.

7. **Well, another thing that I noticed by going through your site and other publicly available information is that currently by looking at the whole history from the old days of DirectLine up till now that you have the offering of the so-called Digital Banking, RBS –not the Group but the Bank- maintains 2 channels in e-banking; I say channels but I don't know to what extent this is true; there is Digital Banking and Royline Direct. How does this reflect actually the e-banking and e-commerce if you like policies of the Royal Bank?**
8. Well, I guess there are 2 answers: Firstly, the world is in transition so some of our services, and particularly our commercial services are still being run over private networks (value-added networks (VANs) ). We do that because until relatively recently we didn't really believe that the Internet was sufficiently stable in performance to deliver the kind of demanding service levels which our commercial customers require; and so we're still running those commercial services over VANs whereas our retail services are being run over the open Internet.
9. **So if we kind of look back at the Royline offering, which was actually –correct me if I'm wrong- business & SME-targeted product; is there a case for convergence to a unified e-banking product?**
10. Broadly, if you think of it, there are some 'boxes' in the back-office, which are essentially performing accounting functions; they're keeping people's accounts up to date; tracking the payments that are being made from and to them. They are common, irrespective of whether it is a commercial account or a consumer account. Some of the functionality on the commercial account will be slightly different. We tend for example to charge for more activity in the commercial world than we do on the consumer world; so there's slightly different functionality there; but by and large those boxes are the same. There's then if you like some further boxes sitting in front of them which is presenting that data through the e-banking system to the consumer; the functionality that we have does differ: there, we got much more functionality available to the commercial customer than to the consumer; and that's simply because the commercial customer needs some more functionality. We then got the means in which we get that data to the customer. And as I said, on the commercial side, we're still using Value Added Networks, because they can guarantee the kind of performance levels that we need; whereas on the consumer side, we're using the open Internet, partly because we started later in delivering a consumer service and therefore the open Internet had already become more stable, and partly also because the typical consumer doesn't demand quite such a rigorous service as the commercial customer requires.
11. **In the light of this argument that you've just mentioned, how do you see the role of ISPs? What I mean is that most of the banks are effectively virtual ISPs. How do you see the relation of the service – i.e. the e-banking service – offered by, say, RBS in relation to its dependence on the ISPs?**
12. I think that's a very open relationship. Where we are delivering over the Internet, the relationship is actually between our customer and the ISP. It's a little like – I suppose – thinking about telephony. Clearly we don't distinguish – nor would we wish to do so – between a customer who's choosing to use BT and one who is choosing to use Orange or Vodafone or any other carrier. We think this is a decision that the customers should take themselves. In that respect the world is changing because in those circumstances where we still do use a VAN then we chose that VAN. So, the world is becoming a more open one than was the case just a few years ago.

13. **Because of all the supposed threats for e-banking for incumbents, would you say that ISPs or Internet portals or this type of virtual operators are seen as potential threats or a potential competitor if you like?**
14. I guess we have that in the back of our minds, but no one has yet adjusted to take up that stand. All the ISPs that I have spoken to, and I have spoken to quite a lot (of ISPs), see their core business as an ISP; and a number of the big well-known brand names quite specifically don't want to make themselves a bank. They think that is something that is at odds with their overall brand image. They see themselves as organisations, which can give people access to a world of information and functionality, and they don't want to tie themselves down by offering specific services at the end of that. They want their users to be able to interact with whichever bank they choose, rather than trying to push them down a particular channel.
15. **In terms of the RBS' acquisition policies, I noticed that for example Security First Network Bank (SFNB) which was the first bank ever to implement e-banking was bought by RBS in 1998. Just one year ago there was Natwest. Do you see any relation between the acquisition policies in relation to e-banking expansion or in relation to acquiring expertise?**
16. No, I don't. Our expansion policy is very much around acquiring customers, about making the organisation bigger in terms of its core activities. I don't think it's about acquiring functionality outside mainstream banking. I think that (technical) expertise is available to us through hiring-in the people who have it, or by collaborating with the third party organisations that have it; and by and large, it's a little of both; it's mostly collaboration.
17. **This actually leads to my next question: I have seen an evolution in the way that RBS is approaching 'remote' banking if you like in terms of implementation, as I mentioned before, from back on the early days of DirectLine to Royline to Digital Banking offering now. How would you say this sequence of acquisitions of technological expertise has helped the strategy of the group in positioning itself in the electronic banking area?**
18. First of all, I ought to say that we're very much perceiving e-banking as a distribution channel, rather than as it were an end in itself. So, we never thought for example that we could introduce electronic banking and close down our bricks & mortar network. To turn that round, I believe that we can see that it has been very hard for those banks that have tried to operate on an electronic open basis to get themselves established. Some arguably have done so, but they haven't competed effectively against banks like ourselves, which operate on a clicks & mortar basis.
19. **The example of Egg is probably the most evident. Of course it's still loss making**
20. Well, and arguably it's not a bank. It doesn't offer a current account service for example, which I'd say is a pretty central part of most people's relationship with their bank. It's very good for signing people up for credit cards but I think it's very much less than the threat we might have imagined three or four years ago. There was a time when people were suggesting that banks which operated purely on an electronic basis would have such a low cost base that they would be a very serious threat to the more traditional institutions; and that clearly has proved not to be the case, because it's very difficult to deliver everything which the consumer wants down the electronic channel. So what we try to do is to interface with our customers in whatever way they require, and many of them do want, from time to time, to go into a physical branch and talk to someone face to face. They want to



do that if they're undertaking a fairly significant decision, perhaps say, the purchase of a mortgage or the purchase of a personal loan. At the other end of the spectrum, for their transactional business, the electronic channel can be ideal because you can make it available 24h a day, 7 days a week. So, where people simply want to take a check on how much money they got in their account or perhaps pay a utility bill or something of that nature, then clearly that channel is an extremely helpful one for them to use. And of course, we then got telephony which kind of sits in between each of those channels, and which again many people use. So, we have a lot of consumers who, in fact, use all three of those channels for various different purposes. And going back to the essence of what you're trying to write about here, i.e. investment decisions, we view the electronic channel very much as something that we have to do to stay in business, rather than something that we should do because it's going to significantly improve our profitability. So far, I don't think that any of the traditional banks have significantly been able to lower its cost base, and the costs of introducing electronic banking; not significantly anyway. There are some reductions, because if you can persuade people to do things electronically rather than physically or over the telephone, then you can do it more cheaply. But, we're really adding activity here, rather than substituting.

21. **This gets us actually to the issue of customer 'stickiness'. The customer – given that a bank is an institution which invests in a sense in its social capital if you like – likes the directness of talking to someone or dealing with someone within a branch and so on. Specifically, [about] the issue that I'm dealing with, investment appraisal, which is the ex-ante evaluation of the projects, I heard you mentioning that it is not an issue of whether you'll do the e-banking project because it's going to pay back very easily, but a matter of staying in business. What would you say is the role of the financial evaluation per se in the overall 'calculation' of the project's value? What would you identify to be the pertinent issues in appraising an e-banking project and how –if you know- these are being integrated?**
22. As I said, we start with the thesis that this is something that you have to do to stay in business. The kind of decision that you're taking is no different to ones about, for example, upgrading telephony or putting in email systems; it's all infrastructure. And doing ROI calculations on infrastructure investments is notoriously difficult; and we don't really do it frankly. We say "we have to do this to stay in business; now let's then work out what it is that we do have to do". We try to achieve 3 things: First of all we're trying to recruit new customers and we *can* reach some new customers online. Secondly, we're trying to retain customers, customers who demand an e-banking service as a condition of doing business with us; and then thirdly – and this is the really interesting bit – we try to improve our relationship with those customers by effectively selling them more products. So it's *recruitment, retention* and *remuneration*. Now, having taken the decisions about what functionality you need to offer, you have to take another set of decisions around service levels, though –typically- they're fairly straightforward because they're all about being up 99.99% of the time, about having a site which functions enough quickly and smoothly, so that people don't get frustrated, and about functionality: what products or services you're going to offer out there. Having done all of that, the only real calculation that you have to do is how can you meet all those requirements as cheaply as possible. So, in a sense, you're reversing the normal ROI calculation, because you're really trying to get to a different conclusion. You're not trying to work out what return we're going to get on this investment; you just have to do it. So, the only question you're trying to answer is "how can we do this at the lowest cost and still do it effectively".
23. **So, in effect, it *is* a strategic decision; it's not a financial one.**
24. Absolutely, it's an infrastructure decision.

25. **Now, in relation to the implementation of the different e-banking systems, between financial expertise and IT expertise, which one would you say is most pertinent for successful implementation?**
26. Interestingly, I'd say it's neither of those; I'd say it is the marketing skills, which are necessary to understand how the customer will want to interact with your system. So, you can structure it in such a way that they *enjoy* interacting with it, and want to come back and use it frequently, want to do more and more activity through that channel, and hopefully want to take more and more services from us. So, we do a lot of work around – for example – ensuring that people can get to wherever they need to be on the site in a minimum number of clicks; we do a lot of work to try and make it as interactive as possible. We have some devices on there, which I would call 'toys', but we have some calculators, some little 'illustrative devices' to show people how they might think about the way which they use their money, like the way by which they spend money on housing, food and holidays and entertainment; just to show them a means of thinking about it. Clearly, you have to be good at the IT execution; you have to make it all work; there's no point in putting all this together if it doesn't just function correctly. But from my perspective, that's really the easy bit, because I can find people internally, or I can go outhouse, and with lots of people who can really do this very well, it's not a very obscure science. There are lots of people working in this area, and getting the bill done is not really a problem. There's always some competition to get at the back-end systems and that's something which all banks in my experience find a frustration. There are only a limited number of things that you can do on the mainframes at any given point in time, so quite often you can't do things at quite the pace you want to, but by and large, it is possible to get most things done and to get them done quite easily.
27. **That is a very interesting perspective; it is quite surprising to hear that marketing is the key issue. I have seen a 1999 report by Booz Allen & Hamilton (BAH) calculating the costs of full banking vs. Internet banking; all these calculations proved to be very very sanguine.**
28. Well, absolutely; that report is now hugely discredited, which is a bit of a shame actually; as a firm, I like Booz Allen & Hamilton and I've done a lot of work with them. But, of course, what they assumed was that if you could get one customer to transfer most of his activities on the electronic channel, you could cut out all the costs relative to the bricks and mortar network. And you *can't* do that; because you still got other people wanting to use that bricks & mortar network. I can see how, over a very long period of time, you might be able to get to the kind of levels that BAH is suggesting, but I think they're so far over the horizon that we just don't effectively think of them.
29. **There is the so-called 10% rule in marketing (the fact that the cost of selling a product to an existing customer is 10% of selling it to a new customer), and I think that that's one of the reasons why these estimations were mostly very sanguine. In relation to the future of electronic banking, there exist a number of scenarios – and we can go on forever with describing these; some contend that pure plays, firms with strong customer base (and what comes in mind here is for example the utilities) may gain significant market share; others believe that there is a case for the so-called decomposition of the e-banking industry into a more well-defined set of segments. What would you say that your view is on that?**
30. These threats have been around in one shape or another for as long as I can remember - and they've been around most certainly before; for example there has always been concerns that the utilities would provide a banking service; before the days of e-banking, it would be possible to do it over the telephone, or there were

talks about utilities joining forces with other businesses with big distribution networks, like the post office and the super markets to do it. Now, it would have been perfectly possible to work in that way; In practice, when I talk to the executives in those organisations, they're so busy trying to run their own business, that moving into banking is something which probably comes out once a year in the strategic review, but not really gets taken forward. That's *not* to say it won't happen, and therefore I have to be very careful not to become complacent about that; but what I am saying is that I don't think that the advent of e-banking has really made it easier for those organisations to get into banking. Telephony, or collaboration with other organisations would, I think, have made it equally as easy, but so far, no one has really chosen to do it. In effect, what tends to happen of course is that those organisations tend to partner with traditional banks to get into that marketplace; and that's exactly what we've done with the likes of Tesco and Virgin and others. So, I think the more likely trend is first of all we continue to see consolidation in the UK and indeed in the global banking market; but I think we'll continue to see banks take-over other banks. We will see fewer but larger banks and we'll see consolidation also in the different types of financial institutions in the marketplace, so we will see, I think, more services being delivered through the banks themselves rather than through more specialised institutions like the insurance companies, stockbrokers or investment houses etc. The so-called related entrants. And some of that will find its way to the electronic banking channel. But I think we'll be quite selective about what we push through that channel, and I *don't* think we will push, or try to push, everything through it at once. You've probably seen that a number of organisations which have tried to provide online stock broking have singularly failed to meet the targets that they thought they were going to make. You've probably seen that Merrill Lynch and HSBC are rapidly back-peddalling on their high net-worth proposition. And there's no doubt that, first of all – and I'm sure they would admit this themselves – they overestimated the market in the first place; but I think the other thing they overestimated is the willingness of individuals to commit large sums of money across the PC. And that's *not* because they don't have faith to the technology; it's just that they would rather that they got someone else to do it on their behalf, mostly in terms of receiving a price from those individuals. So, in my experience, a very high proportion of those individuals with significant sums of money to invest, naturally want to take professional advice on their investment. And having done so, they put their investment through the broker or adviser that they have dealt with. And only a small proportion really have the confidence to take those decisions themselves and make the investment through it straight.

31. **You mentioned transactions of large sums of money. Would you say, given that e-banking is a utility that the customer uses instead of going to the bank, that in a way the bank transfers the 'responsibility' of the transaction to the customer? Is this in any way translated into a more tangible numerical figure? For example, is this channel a way of reducing the number of errors for which the bank is responsible?**
32. It certainly does [transfer the responsibility]. I'm not sure we've ever done that calculation. I suppose there must be a positive effect, because wherever you introduce straight-through processing, you do reduce the scope for errors; having said that, my instinct is that the amount of money that you lose through that way, is probably quite modest. So I don't really think it is a factor in any of the decisions that we make. Certainly, if we go back to the commercial side of e-banking, getting to *straight-through processing* is a big issue for the industry as a whole, and it's one of the things that we work on quite considerably. You are probably aware of the fact that most UK commercial e-banking systems are, for example, linked into international networks, so it would be possible for example to sit here in London and make a payment from an account to an Australian bank in Australia. That does two things: it does take-out some error; and there are lots of checks in balances in



the process to make sure that the error is removed; so for example, if you made a mistake with an account number and you keyed-in an 8 instead of a 9, there is a modulus calculation within the account number to pick up that sort of thing. So, if you hit the wrong key, it should reject it and cause it to go back. But the other side is much more inefficiency in the force-feed. In terms of international banks, because banking systems vary from one country to another very often, some of the data that you need doesn't arrive with the payment. All the banks employ quite a lot of people involving something we call 'payment repair' which is dealing with all the things that were rejected; and that works on a manual basis. What e-banking allows us to do is to put some control into this process, so it is more difficult for the originator to put incorrect information in. And that means that the transaction can flow through much more quickly because [the system] is not going to reject it and hence reduces some of the cost for us too. There is quite a benefit to us in e-banking in that respect.

33. **Speaking of turning things into numbers – making calculations – once, say, the Digital Banking project was completed, did RBS do a calculation of what are the benefits?**
34. I've got to be careful, I suppose, in what I call a detailed calculation because so much of what one does can only be based on estimates. But we personally do that on a very regular basis. What do we think are the benefits that we're generating here? We track them on a weekly basis. We do target ourselves to trying to meet the goals we've set in the first place. But mostly those benefits are around the number of transactions that we have carried and the number of sales that we achieved. It's much more difficult for example to measure customer satisfaction. We *do* measure customer satisfaction; but it's customer satisfaction with the bank as a whole, rather than simply the e-banking channel.
35. **Did you notice any surprises there, in the ex-post evaluation (as opposed to the expectations, let's say)?**
36. I think that we have been pleasantly surprised at the degree by which we can sell things over that channel. I think we had originally perceived it as a transactional channel through which people would manage their accounts. We are clearly finding ways in which we can build a relationship through these channel too; and that is something that I didn't expect to quite a degree that we have it.
37. **That's an interesting observation; now, in terms of technological standards, first of all, [let me observe that] the pace with which e-banking is moving, is maybe too fast for ISO or any other international standards organisation. I know that the existing standards – OFX and IFX in the U.S. and HBCI in Germany – are the ones prevailing. What is RBS' take (in terms again of technology implementation) in relation to e-banking standards? Are your thoughts directed to this channel, or there is a case for banks joining forces in order to make their own standard a global one?**
38. I think here in the UK, that is not something that is at the forefront of our minds; there *are* things where we need standards in order to get interoperability between one bank and another; but by and large they're in the world of payments, rather than this of e-banking. To a degree, I suppose, standards are driven by two things: one of them is technology standards; we want any person to be able to access from any machine with any browser over any ISP. We want to be completely open. Naturally, we use standards like SSL to ensure that personal data is properly secured. What we're not particularly concerned about is making sure that our system is compatible with, say, HSBC's system. I can't really see why that would be of any use for us. We lay out our physical branches differently to HSBC, so

each of us thinks that we do that to please the customer. We want to be totally open, but interoperability with other banks is not an issue at an e-banking level.

39. **In the line of these thoughts, there is the appearance of the product called the 'account aggregator'. Do you see account aggregators in a positive or in a negative way (e.g. as possible entrants)?**
40. Well, my personal view – and I wouldn't say that everyone else here shares it – is that customers will start to demand account aggregation. Now, naturally, we rather prefer that they didn't, because one of the selling points we have is to say "if you have all your accounts with us, then you can manage them through one screen". But as I say, I think the market will demand aggregation and I think we'll have to provide that service. I don't think that new entrants will gain any long-term advantage by exploiting what must appear to be a rather dilatory attitude of the traditional banks. They might gain some short-term advantage, but that happens on many occasions when people come in with a whole range of different service offerings; they don't have to be an e-banking offering that gives them that advantage. The thing the industry is wrestling with at the moment is really the question of liability. Again, if I just step outside the e-banking world for a moment, in the early days of ATM usage, you would get the customer who would say "look, I used my card in a Lloyds bank machine; it didn't give me my 50 GBP, but the 50 GBP has been debited to my account". Did the customer really get the 50 GBP and he's not prepared to admit to it? Was it a Lloyds bank machine that malfunctioned – and it's therefore their liability? What if the card has malfunctioned? How on earth are we going to resolve this? Now, over time, we've managed to solve all these problems and we've got a strong agreement now through the Link scheme, so everyone knows exactly where they stand; everyone knows whose liability it is at any point in the cycle. We haven't got that far in the aggregation debate yet. So, the primary reason frankly why we won't allow, say, Citibank take our data for use in their site is that we haven't solved this liability issue. So if a customer who was using CityService would come in and say "look, you know, 1000 GBP has mysteriously disappeared from my account", we need to have worked out how we deal with that kind of situation. As an industry, we just haven't done so. We started to, but it takes quite a long time to work through all the issues; of course the sums of money at stake can be quite significant also. So, for the time being, we think it's best to keep the door closed.
41. **So, the way I interpret what you say is that it's a matter of industry maturity.**
42. Yes, that's right; and I think it will happen over time. I really find it hard to predict how long that timescale will be; but we are all sitting around the negotiating table month by month, just trying to move the thing forward.
43. **There is another issue I wanted to ask you about: Has the failure of some pure plays – like First-e – or other virtual firms, as I prefer to name them, (e-commerce firms and so on), changed your perception of Internet technology and specifically the way by which it is being evaluated and appraised?**
44. It hasn't changed my view on the technology; it probably *has* changed my view on the business model. A couple of years ago, I could have been convinced that a pure play was a good thing to do and that we would see some pretty intense competition from people like First-e. We were naturally concerned that those organisations were going to come into the market with some outstanding, typically price driven service offering; and indeed that's what they did – and Egg is probably the best example. But, in practice, we found that those business models are not sustainable; that people –as I said earlier- *do* want to access their bank through a variety of different channels. And most people want cash; they, at the very minimum, need to go to an ATM. I appreciate absolutely that First-e was offering

ATM cards, but when your card doesn't work on that ATM, you're not in a good position to walk in a branch and say "can you give me some cash anyway?". So, it works to a degree, but it didn't work as well as people wanted. And people are naturally quite choosy about who they take financial services from. If it's important to you – and I think it is for most people – to know that we can get access to cash, then you don't deal with some organisation that isn't in the UK, who you won't get to, face to face. I think that's the lesson that the people have learned. So, my view is that the clicks & mortar model is absolutely the right one to go with; I think we're deploying that as successfully as anybody. I think that it might be possible for some pure plays to survive inside niches, but I think they are going to be just niches; they're not going to be mainstream competitors. I'd be much more concerned about foreign banks that still want to come in the UK than I would be about pure play start-ups.

45. **Right. I have probably taken more of your time that I had promised to do initially. I hope you found this conversation as pleasant as I did. That was more or less what I wanted to ask you about, and I found your take in several issues very very interesting for my research. What I would like to ask you, if this is possible, is would it be fine if we have a follow up conversation at any time in the near future either by phone or face to face?**
46. Yes, by all means. I'll be perfectly happy to do that Georgios.
47. **Once I transcribe that, I will make sure you get a copy of this discussion. Thank you very much again. It's been great talking to you.**

## 1.2. Interview, 29/05/2002

1. **GS - Since we haven't had the chance to meet before, I'd like to tell you a few things about myself, who I am, what I'm doing, where I come from, and then we can discuss a few things that I wanted to ask you specifically about Internet banking.**
2. **FK - Yes, sure.**
3. **GS - I am originally a Computer Engineer; I worked for a few years in Greece – that's where I come from – as a networks engineer. I took an MSc in Telecoms in Manchester a few years ago, which was about wireless applications, and did some work with Norweb; A few years after that, I did an MBA here; currently I'm doing my PhD and I am a Research Associate here, working with Prof. James Fleck. As you can see, my 'descent' is from Engineering, and what I'm currently investigating is aspects of technology from all points of view; strategic, economic, social and so on. What I am particularly fascinated by, is the way that technology has shaped things in banking; and this why I am doing this PhD – these are my crucial questions. So, that's who I am. Now, would you like to tell me a few things about yourself?**
4. **FK - Yes. I trained as an Economist; I taught Economics for 10 years; then I moved into Public Policy, and then I moved into Financial Services in 1988. I worked for the Royal Bank for 8 years, initially as their Director of Strategy, and then as the Director of Retail Banking. Since leaving the Royal Bank in 1997, I have worked mainly in Insurance and the Media.**
5. **GS - Let me start from the early days in the Royal Bank; you mentioned that in 1996 there was the discussion about electronic banking; would you like to tell me a few things about the history of e-banking in the Royal Bank of Scotland? I know that there is deep history from the early days of Direct Line to Direct Banking, Royline Direct and so on.**
6. **FK - Well, let's take Direct Line first of all; Direct Line is a completely separate operation from the Royal Bank: separate systems, separate management. Purely a telephone-based operation; it has never got into Internet delivery and I don't believe it intends to do so. Well, it got into Internet delivery on its insurance products; it has not got into Internet delivery on its FS products. It is run as a very very separate venture; set-up by an entrepreneur who happened to find funding from the Royal Bank. So, I think you can almost leave Direct Line on one side for the moment. The Royal Bank, in 1992, was going bust. It had just reported very very low profits, \$26m, which was a fall of about 90% from the previous year. It had a cost base, which was expanding out of control, and it had a bad debt problem, which was just beginning to become clear, as the recession was getting in the UK. The existing management was removed, and a completely new structure was put in place, which revolved around 4 businesses: The American business, a retail banking business, a corporate banking business, and a manufacturing operation, which supported corporate and retail banking. The management of the retail bank decided very early on that they were going to fundamentally change the cost base; and one of the ways they thought to doing that was to actually migrate customers to lower cost channels. So, in 1993, they began to investigate very heavily putting in place a telephone banking operation, which subsequently became Direct Banking. Their hope with Direct Banking was that this would migrate lots of transactions away from branches, allowing them to either close branches or reduce the staff level in branches. In fact, that didn't happen. Instead, it induced considerable volume of entirely new transactions. This is an experience that lots of**



other banks have had as well. About the end of 1995, people at the bank, began to become aware of the Internet; they were not entirely clear about what it would do; it was considered a good thing to set-up a website for the bank. So a website for the bank was set-up. It was set-up when I was running Retail Banking at the time, and one of our marketing people said to me: 'Look: we should set-up a website'. It didn't appear to be an expensive thing to do, simply apply a new technology, we set it up. We were surprised at the number of hits the website got. We found that people, at various times, were sending us messages, typically saying 'when are you going to offer electronic banking? – and Internet banking'. The first thing that struck us was that we actually needed a resource to respond to these messages which occurred, and the volume of messages began to grow quite rapidly. When we actually looked at where the messages were coming from, very few were coming from the UK. They were mainly coming from abroad: lots from Japan, lots from America. They weren't coming from our customers. At that stage, the awareness of the Internet in the UK was very very narrow. Over the course of the next year, we began to see rather more queries coming in from UK-based people. When we began to get the upgrade for our customers, we agreed to offer Internet banking. So a project was set up at the end of 1995 -beginning of 1996 to actually look at an Internet banking operation. And, at that stage, it wasn't clear whether we should offer separate products, have a separate brand, have separate pricing, or whether it should be a complementary channel to existing channels. I'm thinking really we were not very clear on that, and that many of these things got bogged down on politics. There was a small group of people who wanted to set-up an Internet banking operation which *they* wanted to run; they wanted it to have nothing to do with the Direct Banking operation, and as little as possible to do with the traditional bank. And they had, I suppose, a number of motivations for this; the first one was that there was very much a flavour at the time that if you wanted to setup something like this, you had to do it outside the traditional structures. And the second was that there was obviously a much more rapid advancement for them: if they could make something like this work, then you would implement it very rapidly. Personalities very much got in the way of the analysis: people didn't talk to each other, people developed systems and proposals and showed them to people secretly and that sort of thing. It wasn't sensible. And, as a result, when the Internet banking operation was first launched, it was launched using proprietary technology, it was clunky, it was cumbersome, it was crude; and it was not aggressively promoted. And so it was for about 3 years, it wasn't even Windows-based; so it took 3 years, till the Royal finally realised that this is actually just another delivery channel like the branches, like the call centres; it should be branded as such, and we should use it as a way of actually taking transactions from more expensive channels. So they re-launched it as Digital Banking, which was a Windows-based interface, which is actually pretty similar. In the meantime, there have been aborted discussions with Microsoft, who had at that stage got very very grand visions of what MSN would actually become, and wanted to have a number of banks on MSN, but with Microsoft as the gateway. But the bank has taken the decision very very early on that there was no way that Microsoft is to become the gateway to Royal Bank customers. There were discussions with Quicken, about adopting Quicken's embryonic software, and putting a telephone banking front-end that Quicken themselves largely developed at that stage, but those discussions foundered on issues of branding and customer ownership and all the rest of it.

7. **GS - You have told me that you had so many hits from around the world. Was it something particular about the information or the products of the Royal Bank offered at that time? Or was there an Internet hype, do you think, that you got so many hits with the question 'when are you going to offer online banking?' What I'm asking is 'were the products that RBS was offering at that time very attractive, so that people wanted to buy into them, or was it technology that they wanted [to buy into]?**

8. FK - No, the products were absolutely 'middle of the road'. There were in no way distinctive than on any other bank. It was Internet hype, people browsing, perhaps keyed in 'Scotland' or whatever. There were no products available at the site. All there was on the site was an organisation chart and the history of the bank. That's all. And that was all that remained for a very very long time. And the usual evolutions and product brochures went up. But there was no transactional capability. And to the best of my knowledge, there was no transactional capability until 1998.
9. **GS - It was interesting that, these days, there wasn't much around the marketplace on Internet banking anyway. There was nothing like the experience that currently exists on different e-banking entrants and pure-plays and so on. Bearing that in mind – strategically – what was the justification for doing it? Was it just that? Was it an offensive move? Was it something that you thought you had to do?**
10. FK - Initially, it was a low-cost way of actually learning some more about this new phenomenon called 'the Internet'. Subsequently, it became a defensive move. It became something that every bank had to have. Better customers wanted to be able to access the bank over the Internet; they wanted to be able to transact over the Internet. That became very clear quite early on. So it was a defensive move. It was never seen as a means of acquiring customers, it could rationalise it as a way of increasing the bank's reach beyond its existing branch network, which in terms of penetrating the English marketplace was quite attractive. But when you actually look at the costs of acquiring customers on the website, it is pretty high, because you have to promote it aggressively. And it was just as expensive to promote a website in the south of England as it was to promote a branch in the south of England.
11. **GS - That brings back in mind a notorious, I would say, report from Booz Allen & Hamilton out in 1996, talking about the costs of managing customers over the Internet vs. managing customers over a branch; I remember [it said] the cost of managing an account over the Internet was 1% of the cost on a bricks & mortar basis. Why do you think this report was so 'out of reality'?**
12. FK - Well it was out of reality for a number of reasons. The first one is that it didn't take any account of the cost of actually acquiring the customers. And customer acquisition costs are far far greater than the customer management costs. And the second was that it ignored the fact that branch infrastructure, physical infrastructure, is actually lumpy. You can't reduce your physical infrastructures by 0.5% or 1%, you'll reduce it by 2% or 4% or 10%. You have to close distinct elements. In many cases, when you close a distinct element such as a branch, if you have 800 odd branches, by closing 1 branch, you don't reduce your cost by 1/800; you reduce it by considerably less. Because there is a whole processing infrastructure behind, which is going to be required to support any of your 800 branches. So, they failed to scale the cost base, and to align the cost base for the traditional banking to the customer base if you like.
13. **GS - From these days until now, we had a dot-com boom and – arguably – bust. How have you seen the perceptions of people in companies trying to implement Internet banking change?**
14. FK - I think that the growing realisation has been the cost for customer acquisition, which has killed a lot of these ventures; but they spent so much to acquire customers, either in terms of advertising and marketing to get them to hit the site in the first place, or in terms of getting a subsidised product, to attract them and keep them. But that kills the economics. For an existing player, with an existing brand and an existing customer base, you don't have these costs of customer acquisition.

So to the extent that you can actually manage to induce customers to switch their transactions from expensive channels to the cheaper channel of the Internet, you potentially reduce your cost base. Potentially. I say potentially, because you can only do it in such an extent that you can actually scale back your traditional cost base. And if, let's say, a third of the customers at a particular branch start to use the Internet, to do their transactions over the branch; you can't close the branch. So, you have the additional cost of the Internet channel, and you still have the existing costs of the branch.

15. **GS - I see. You just mentioned the additional costs of the Internet channel; Is it true that a high proportion of this cost lies on – not only the electronic Internet system itself – but on the support (technical support or things like that). Would you say that this is the case?**
16. **FK -** Yes. Once the system has been built, the major cost is then in supporting it and manning a helpdesk. In fact, you have to originate, in many cases, documentation to actually go along with the transaction. For various regulatory regimes, the documentation can't just be printed-out from the customer at their own PC. So there's a whole fulfilment exercise in the background. You also have to take legacy systems, which previously were not actually designed to provide 24h access to the bank, and re-configure them so that they do now provide 24h access. So there's a very very substantial development cost to it, and then there is quite a supplementary cost per hour. To the extent that you can interface the running costs with, say, your call centres, you may be able to reduce them somewhat, but there is an increment of cost above that.
17. **GS - Let me now move on to strategic issues; regarding competition on the e-banking field, (about the way it currently is, and the way it was perceived before). There was the contention, in many journal publications and so on, a few years ago, that just anyone who had the technological expertise and the infrastructure can compete head-to-head with banks in that area. It used to be quite a scary thought in the minds of people who worked for banks. Do you see that this held, or still holds true?**
18. **FK -** No, it hasn't held true; I don't think it still holds true. I can't see a single significant player, which has come from outside the industry.
19. **GS - I see. Would you say it is an expertise thing?**
20. **FK -** No, again, it comes back to the customer acquisition bit. If you don't have an existing brand and the trust that goes with all financial services firms, people would be very happy to borrow money from you. But unless you are going to lend the money much more cheaply than anybody else, or in a different way from anybody else, why should they bother borrow from you? They're unlikely to place their money on deposit with you, unless they know your brand and trust you. So the various attempts to set up financial institutions from outside the industry have, to the best of my knowledge, all failed. Telephone companies may manage to capture some of the territory with channels of small value payments. But I don't think that will bother the banks very much, because the banks' traditional cost structure makes it very uneconomic for them to process small payments. So I don't think banks would be particularly worried if I paid the parking meter with my mobile phone. Not bothered at all. What banks would probably do, is try to ensure that the bill for my parking goes on my credit card, and capture the transaction that way. So, I don't see the banks disappearing by being disintermediated.
21. **GS - So, in these terms, you wouldn't see telecom companies or ISPs being a threat, reaping some of the market share from incumbents, by developing a bank themselves. Arguably, there is a contention that an ISP holds quite a**

**strong customer base and the infrastructure for communications and so on. So that makes some people see that this can be a threat to incumbents. Do you see that at all?**

22. FK - Well, I'm afraid I don't. I don't see it as a credible threat. I think that where the ISPs figure, is in terms of acting as a gateway for some of the existing players. That they persuade the existing players to place their brands on a portal of some sort, and the existing players pay a commission; those models do work. Because they reduce the cost to the existing players of actually acquiring a new business and they provide a commission income stream for the ISP. But an ISP re-inventing itself as a financial institution, I think it is fraught with difficulty from the regulatory side of things, right through to the technical and expertise.
23. **GS - [There is the idea] that one of the loopholes in e-commerce is that it doesn't generate a clear income stream to ISPs that is coming from a financial institution or any other company. Would it be the case that an ISP which has a large customer base (and offering the intermediate bit between the customer and the bank) could put pressure in any way to a bank, to acquire some profits from it, on the basis that it is offering some service to it?**
24. FK - What is it offering that the bank isn't offering already? As a customer, what is the ISP offering me that I don't get from my bank? If the bank already has an Internet banking operation, the ISP is purely the carrier, just the same way a telephone company is the carrier when I want to phone you. Doesn't add any value. And because there is a lot of ISPs, I can always get someone else. If it is a monopoly ISP then yes, perhaps. But with the provision of Internet access as a competitive marketplace, I struggle to see what the ISP wins. If you are a portal like, say, Freeserve which lots of people log-on to, then it's worth a bank's while having a presence on that portal. But this is a model that has existed for a long time. They're just treating the ISPs as an affinity group. Just the same as they treated old people, or people who like dogs or whatever; as a particular affinity group of the market. They're using their ISP in exactly that way and the underlying economics of it.
25. **GS - Right. There was another contention going about on segmentation of customer base according to net worth, based somehow on Internet banking. We have seen some moves from MLHSBC and Lloyds who made CREATE and then dumped it.**
26. FK - And MLHSBC is now gone as well. They now have broken-up the joint venture.
27. **GS - Yes, the last time I had the chance to look at that case, they were quickly back-peddalling on it. Do you see there is any future in that? I mean, splitting the customer base in terms of net worth?**
28. FK - I'm not sure it is any more effective being done over the Internet than being done over the conventional channels. Banks have always tried to identify their better customers and provide them with a better level of service in terms of personal banking. At the top end, your personal banker will do everything for you: book your holidays, find a vet for the dog and all that lot. At the lower end, a personal banker is someone you speak to at a call centre. Trying to replicate the same approach over the Internet? Yes. I think it makes sense. Again, I think what harmed people like MLHSBC is the fact that they weren't starting with their existing customer base. They were trying to recruit new customers; and it is extremely expensive to do so.



29. **GS - There is an issue on switching costs that I wanted to talk about. The Internet is notorious for bringing down barriers and reducing switching costs and so on. However, there was a recent report in Datamonitor which I came across, which said there was quite a large percentage of customers who wanted to change FS provider (in UK and Europe) but they didn't because they found it too difficult. Do you think this is true, or is it a perception issue from the customer point of view?**
30. **FK - It's not difficult, but it's done really badly. The reason those people are reluctant to switch current accounts - which is most people's main financial relationship with their bank - is because in the process of doing so, some of their direct debits or standing orders will be lost. So their car insurance or their mortgage or their alimony doesn't get paid, whatever. And then they have a lot of trouble trying to find then who made the mistake, trying to sort it. And people will put-up with very very bad service from banks, rather than take the risk of having some of their existing payments go wrong. I don't see how the Internet can actually make that process any easier. Because the flow in the process is that my existing bank passing all the details of my existing standing orders, direct debits or any other payments, on to my new bank; which implements them seamlessly, and my old bank discontinuing all of them. Typically what happens is that my old bank doesn't discontinue all of them - it continues to pay some of them - my new bank miss-keys some of them, so they go wrong, and it is a mess. So I don't see how the Internet can actually make that any easier.**
31. **GS - I wanted to move on to issues more related to financial appraisal, my key area of focus. In taking investments decisions for propositions on Internet banking, what do you see the role of financial appraisal per se being? Do you see that this is something driving the decisions? Is this something justifying the decisions? Or is it something in between?**
32. **FK - I think it depends very much on the stage of the economic cycle on which the decision had to go. If it's being made in the current plan, which is one where trading positions are tough, the investment will be approved only if it can demonstrably increase revenues or cut costs. If it fails to match either of those tests, the investment will not be approved. If I were to go back several years to more bullish conditions, then provided the numbers weren't too loud, it could be justified for strategic reasons, or defensive reasons, whatever. But now it's much more financially driven. That's my impression. And it will change as the cycle comes back up again.**
33. **GS - I see, so what you're saying is that it's a matter of economic cycles.**
34. **FK - Yes, the relative importance of the financial appraisal depends on the state of the economic cycle, in my experience.**
35. **GS - I was slightly surprised from what you said in your email: that when the Royal Bank was about to do the Internet banking project, there was some money in the IT budget, so they did it. I have 2 questions: One is, if e-banking was seen there as a strategic decision - i.e. something very important - wouldn't it have been valuable for the Internet banking project to compete with projects outside the IT budget? It is an issue of allocation of financial resources. Or would it still be restricted from the existing IT budget?**
36. **FK - The key constraint on implementing projects at the Royal Bank was IT resource. It wasn't cash; it wasn't project managers; it was IT resource. So if that constraint wasn't bounding, projects tended to happen. And yes there were specialised models and methodologies to calculate NPV or IRR and so on, but as you know yourself, you can fudge those numbers to present any answer you want.**

And with a plausible set of numbers, and IT resource available, you can get it out. You also need, in any organisation, people to have a degree of vision; and the idea about banking over the Internet in 1996-97 did require it to be a vision, because this was still very much a minority technology; the percentage of people in the UK with Internet access were very very low; the notion that we were going to see companies like Amazon or FreeServe growing to the size they've grown was going to happen. So you were, to some extent, telling a story in getting approval to implement something like this.

37. **GS - So, what you're saying is that currently things are – as conditions are financially tighter – more financially based than they used to be. One of the issues that I am investigating is how financial institutions (who are by definition the experts on investment) evaluate their own IT investments. Do you see currently a difference in treating IT investment and other types of capital investment in banks?**
38. FK - No, they're both being assessed in the same way; IT, certainly for a long time, has been a critical resource; the critical constraint. There were many many [IT] projects, which met the investment appraisal criteria, but there wasn't any IT resource.
39. **GS - I've seen in the literature – and there probably are in practice – many ways for investment appraisal and valuation. Which would you say are the most popular? Just as you said, you don't see a difference on how banks treat their IT investment and other capital investments. Is it more simple payback or NPV calculations that they do?**
40. FK - All that I've seen is NPV calculations.
41. **GS - So, there wasn't anything more complex? What I mean is that there are – in the literature – different advanced methods like hybrid methods and the ones that try to put some value in the strategic assets of the company, knowledge assets of the company; like Real Options which are supposed to be giving a value to uncertainty and so on. What I'm trying to find out is: is there any practical use in these?**
42. FK - I've never come across them. I've worked with a number of financial institutions in the UK and the US. I have never come across any of them. I've come across simulation models – which run Monte Carlo simulations on the NPV, to see what the distribution of outcomes is likely to be, and how robust the conclusion is that this is the project. That is the most sophisticated I've seen. And then the Board threw it out, saying 'this is spurious'. We actually got the point estimate.
43. **GS - That brings me to another issue, which is the treatment of uncertainty as risk – using higher hurdle rates for more difficult outcomes. This seems quite an arbitrary assumption.**
44. FK - Well, it happens. Quite clearly, there will be a centrally prescribed discount rate. The group finance function will say 'the discount rate to be applied to projects is X'. And people, if they wish to demonstrate that this is a rock-solid project, they will actually say 'well, I've increased this by 3% to allow for the additional risk or whatever'; and occasionally you see it the other way where people arbitrary tell you 'it shouldn't actually be 15%; it should be 12% because..'. So, yes, people do play with the discount rate. You have to remember that the average person who is doing these appraisals has not been through an MBA programme. They struggle to understand the basic NPV. They know how to do an NPV calculation on an Excel spreadsheet and that's it: "You put in the outgoing money upfront, then you show

the stream and then define the terminal value. Once you get the terminal value, you just do an NPV"

45. **GS - Do you think this is an expertise issue? More complex methods are there; so is it a matter of whether higher management believes in them? Or is it that most of the people who do the appraisal are not up to this type of more deep financial knowledge?**
46. FK - I think higher management takes a very pragmatic approach and says that the only certainty on this investment, and the only thing approaching certainty, is what we have to actually spend to execute it. The revenue projections they're putting in are guesses. So, what is the point of applying extremely sophisticated and analytical techniques to guesses? So let's actually concentrate on making the guesses a bit better, rather than applying very very complicated techniques to what could be completely miscalculated figures. And I had yet to see a projection for the revenues or the cost savings from an investment or project, which had been borne out in practice; almost invariably they turn out to be too optimistic. So the concern of the management is 'no; let's actually justify the numbers we put in, rather than apply more sophisticated techniques'. And I think they're right.
47. **GS - So actually, strategic appraisal of a project, and financial appraisal of a project are seen as 2 completely different things?**
48. FK - Can I justify strategically and then can I make the numbers work? Yes. You know yourself that you can always produce a set of NPV numbers which work. You can! You just play with it. The real argument – there are 3 hurdles you have to get over – (1) can I convince people that this is something we need to do? That it fits with our vision; that it fits with our strategy. (2) Can I actually persuade them that the numbers make sense? Can I fudge the NPV? And thirdly, can I actually get hold of whatever is the scarce constraint; the scarce resource? In the case of many banks, certainly running up to the Millennium, it was IT. And that was it.
49. **GS - Now, do you feel that there are items in the CBA process (I take it that this is actually what is going on for such projects) that are left unnoticed regarding the implementation of an IT project, and specifically an Internet banking project? What I am trying to get at are the perception issues. Because, just like NPV or any financial tool, it is just 'garbage-in, garbage-out'. Do you feel there is something in the overall process, some hidden sources of value, or some hidden costs that are being left out?**
50. FK - Again, I don't think that the Internet is any different from other investment projects; or other technology projects. To the extent that you are doing something, which has not been done before, you will probably not spot all the implications. The implications in terms of actually making your systems function on a round-the-clock basis, and to the extent that you don't spot it, it won't be in your investment appraisal, and your NPV will be biased upwards as a result. If other people have done this sort of project and you're coming to implement an Internet banking project, 4 or 5 years after everybody else, then I would expect that you should be able to pick up pretty well all the dimensions.
51. **GS - Is there a case for continuous appraisal?**
52. FK - Well, when you look to achieve by, because once you have actually made the initial investment, the only options are either run it, or write it off. Now, it may well be that as you begin to implement the project, if you discover: 'Hey, there are some very expensive implications from this that we haven't thought of', if those are sufficiently big, it may well be worth going back to the board and say: 'We told you

that this had this sort of an NPV; well since then, we have discovered this'. And you come back with a little 'maybe' but you may well come back with a recommendation to stop. MLHSBC for instance. Somebody must have turned round and said "We told you that this would be great, but it's not". And there must have been lots of cases like that. So, I suppose, yes, with any investment, you should be very very clear that there are milestones and deliverables along the way. And if you don't hit these, you need to be reassessing. So, it's like any implementation of strategy: what am I trying to achieve? Am I actually hitting those milestones? If I'm not hitting them, do I have a feedback loop to actually make sure to go back and re-evaluate one of them? I don't think Internet banking is any different.

53. **GS – As I mentioned before about valuation of knowledge assets and so on, things like measuring knowledge assets or brand valuation and so on, do you see that as something that would offer value to be disclosed in financial statements; in numbers?**
54. FK – No, not at all.
55. **GS – Let me now move on to the effects of – if there are any – Internet Banking on the organisation and in the way it works; for example, the implementation of Internet Banking in an incumbent – a bank – how have you seen that in your experience shaping the way that the organisation works? The relation between the different departments; i.e. you mentioned back in the early days of the Royal Bank where people were not disclosing their plans. This is one issue.**
56. FK – I find it hard to identify specific changes that I would associate with it. Because most banks have fairly quickly come to the idea that this is just another channel; so therefore the marketing function will support it, the IT function will support it, it does not need its own dedicated marketing or IT, and so on; we just bolt it on. If they have actually set it up as a separately branded identity, as for instance Halifax has done with IF, like the Royal Bank have done with Direct Line (of course using telephone technology rather than Internet technology), it hence has to be ring-fenced. It develops all its own functions. And part of the justification is that it needs the freedom of the culture that comes with not being part of a very old institution. So I think it depends on how you do it; if you run it simply as another delivery channel for an existing brand, I don't think there are fundamental changes; if you run it as a free-standing, separate branded entity, if you give it the large amounts of freedom that most organisation have actually given these entities, then again it doesn't have much of an impact.
57. **GS – Right. There are a few things around the last bit I wanted to talk about, and that is *expertise*. And before we move on to that, I wanted to make a brief comment on the current account. I have been talking to some executives from pure-play banks, and what I heard from them is that the most difficult part of the banking relation – one of the most important parts of the relation of a customer to the bank – is the current account. And this is what they found to be the most expensive, the most difficult to dig into. Why do you think is that?**
58. FK – How do you mean the most expensive?
59. **GS – I mean it is something that pure play banks cannot actually compete with incumbent banks. It is something that more and more of the new Internet Banking entrants are getting rid of.**



60. FK – It is expensive to run; because it always is transaction-intensive. And, as a result, you need huge systems, which interface with everybody else's. And they need access to an ATM network, and there's a lot of paper processing because people are still writing large amounts of cheques. So it generates huge amounts of transactions across all your channels. So your volume of contact with the customer grows up dramatically if you offer a current account; so it's expensive to run. And it's not terribly rewarding, because the banking environment in the UK does not generally allow people to charge for the services provided in a current account. So, your cheques are free, typically your withdrawals are free, deposits are free; the only way you make money is if people go overdrawn. And preferably if they go overdrawn without asking permission, in which case you're charging very high interest rates, and they hate you! Or you send them a letter, telling them they've gone overdrawn, and you charge them for the letter. Banks have had to introduce a whole series of charges, which actually alienate their customers, in order to try and generate some profitability from current accounts. The alternative strategy, which several banks have followed, and the Royal [Bank] – when I was there – was the first one to introduce it in the UK was the notion of paying a monthly fee for your current account and bundle with the current account a whole series of other options. And I launched the first of these accounts in the UK, it took some time to become established, and now they are a feature in the landscape; pretty much all banks offer them, with fees ranging from 4-12 GBP/month; and they have transformed the economics of the current account. But they were introduced because we have an environment in which pretty well all the services of the current account are free.
61. **GS – Right. I wanted to move on to the Expertise issue; in the 90's we've seen new technology in the banking services giving rise to what you would call the IT/IS expertise in the banking professional area. So we have banking financial expertise and the IT expertise. Do you see another type of expertise coming upfront with the adoption of Internet Banking? Or from these two, which one would you say is the most pertinent for Internet Banking?**
62. FK – I think the traditional banking expertise is the most important, followed by an understanding of marketing. Technical expertise, I don't think it is important at all, because you can just hire these people.
63. **GS – So, it's something that can be outsourced.**
64. FK – Yes, but the great deficiency in banks, I would say, is marketing. And the ability to actually manage and interpret and analyse and use the vast amount of customer information, customer data that they have - banks have very little information on their customers; they have huge amounts of data from which they extract very little information – so, the Internet probably allows you to manage customer relationships in a way; it was much more difficult face-to-face or through the telephone banking channel; but very few banks have actually implemented that sort of customer management over the Internet yet.
65. **GS – Right, I see. Do you see Internet Banking as something that may drive financial innovation at all? I mean in the sense of financial engineering, and how that delivery channel would affect the product itself.**
66. FK – It's tenuous. The only way I've seen it is in terms of allowing customers to actually compare and contrast either different offerings from the same provider or the same sort of offering from different providers.
67. **GS – So you don't see that. Initially – and let me go back again to 1997-8 where there was the contention that the Internet offered a very cheap channel that would allow a margin to banks to offer more attractive products, higher**



interest rates etc. I could describe that in a diagram to be some kind of feedback from the channel to the financial engineering process, whereby you redefine the product that you're going to offer through separate channels – and the Internet is one of them. So you don't see that the Internet gives a drive to the bank to reinvent the product?

68. FK – Possibly to re-price. And that is effectively what the new entrants have done. Without the cost base and the legacy systems of the traditional players, they have come out with very similar products, but with very very different prices. So, they're paying much better interest rates on deposits, and they are charging somewhat lower interest rates on loans. And, if you move away from core banking into things like share buying and selling, they have changed the whole cost structure of that, by putting the Internet or a call centre behind it. And the margins have actually been made on that technology for the traditional banks, similarly in terms of selling some basic life insurance products, where the customers themselves can actually do the fact finding; or in terms of selling some general insurance products, like home insurance or motor insurance. Yes; and some of them have explicitly offered differential pricing between their channels, to reflect that. But I see very little definition of new products, and indeed I struggle to actually think how the Internet would allow me to redefine the product. In a way that could actually provide substantially better functionality for the customer, for instance.
69. **GS – Right. Where would you locate – if there is any – the potential for innovation in Internet Banking?**
70. FK – I think you have the scope for greater personalisation of your relationship with the customer through the Internet channel than you do through the other channels. In theory, you can personalise a face-to-face relationship in a branch; though if you try to do it with large numbers of people it's going to be expensive, because you need huge numbers of staff; whereas on the Internet, you can have something that gives the appearance of a personal relationship. So, while I log on, it automatically puts up the sort of screen I most commonly look for; so it automatically puts up the particular account I've looked up most often, it shows me the transactions on whatever period I particularly looked at, it automatically has a menu with any transfers I regularly make, that sort of functionality. Yes. That's helpful, but it's not radical. It's round the edges. My ability to see where my balance is going; my ability to do some modelling; my ability for instance to take a mortgage and to look at the consequences: 'what's the bill if I paid an extra 100GBP/month on this mortgage? How much sooner it will be paid off?' Those are all extra refinements that you can offer a customer on the Internet. But everybody is offering them. So, they're not a differentiator in any sense.
71. **GS – Right. Now, there is a product – a service actually – that has appeared in the last year or so, called 'Account Aggregator'. Do you see this as something that's moving forward?**
72. FK – Well, there is an account aggregation service about to be launched in the UK at the moment; and several of the bigger banks are threatening legal action against the people behind it, on the grounds that it breaches their security. Account aggregation exists in the States; it hasn't taken the States by storm. Speaking personally, I would love an account aggregator; I very much would love it! Would it cause me to shift banks? If it was very sleek, it might; but if it was very sleek I suspect all the other banks would copy it very very quickly. There aren't any barriers to entry; there aren't any barriers to replication and most of the innovations are refinements of products we've seen on the Internet. So I think it's very hard to use the Internet as a source of competitive advantage; I suspect that's where you're coming from. I think it *is* hard; I really do. I think, over time, you may use it to

squeeze some cost out; you may use it to offer a more varied and richer offering to your customers. But I think it will be very hard to use it as a differentiator.

73. **GS – OK. Now, a final question, and probably the most general question I can make, is how do you see the future of e-banking, at least in the UK? Of course this is more based on guesswork....**
74. FK – I think we will see more automated channels; proliferation of more automated channels. So, alongside ATMs, similar sorts of machines appearing, which perform different functions, particularly deposit-taking machines. That is the one I see.
75. **GS – They're already launching this type of machine I think...**
76. FK – They're beginning to come, but it's very very slow; Nationwide is rolling out a few, and a few others I think; but they're still quite uncommon; and I don't mean the ones on which you actually simply put in an envelop, which you would put a pay-in slip in; I mean the ones which you can pay-in a cheque, and it would capture an image of the cheque and print that image on the receipt. I see that sort of functionality coming. I think a lot of the experiments we saw in the late 1990s, in terms of things like statements printed and so on in branches, may well be overtaken by the fact that so many people have access over the Internet at home to their account details; they can print out statements as they want. I think you will see branches moving on towards becoming selling environments from transaction environments; so the banks will actively manage people to use these other channels; to use the telephone for their queries, to use the ATMs, to use the deposit machines. And they will try and use the branches mainly as a place where I make an appointment to see you, because I want to review your finances with you; I want to discuss your mortgage or whatever; so branches will become smaller. That's just where I see it going.
77. **GS – Well. Yes, that's everything I wanted to discuss with you.**
78. FK – I hope it's been helpful.
79. **GS – Yes, it was very very helpful; one last thing before I go: would it be possible by any chance to recommend some other people that I can talk to about investment appraisal, or about more general things around e-banking? People in banks, or people who are in the area...**
80. FK – Well, the man you should try and speak to is a man called BB at the Royal Bank. I can't give you a telephone number or anything. But if you phone the Royal Bank, it's pretty straightforward. They will put you through to him. Now, BB is the man behind all the Internet Banking technology and development at the Royal Bank; and if he's prepared to talk to you, he will be able to give you a lot more detail about the things we were talking about. And, by all means, use my name. I've only seen him once over the last 5 years; then I met him in a concert about 6 months ago; but he was the person I've worked with when we were putting together the initial Internet Banking application. He is the person who subsequently developed and managed the Digital Banking application. He is the man to talk to.
81. **GS – Great. That will be very very useful. You see, there are lots of things specifically on the investment appraisal side, on the actual implementation of the related projects that I wanted to ask.**
82. FK – Yes, I think he's the best person to talk to. He's a nice man. It's worth phoning him or sending a letter to him. I still have an RBS telephone directory but it appears out of date. I will check his phone up and email you.

83. **GS – Alright. Thanks very much for that.**

### 1.3. Interview, 28/06/2002

1. AH – If you think about it from the point of view of, let's say, the book retailing or the CD retailing, before the Internet, to be a retailer you needed much more infrastructure than you do now; so you either had to have a physical presence or you had to have a telesales operation; whichever way you want to look at it, it would be expensive to set that up, and therefore the barriers to entry were quite high. The advent of the Internet meant that the cost of setting up was very low indeed, and therefore one part of the competitive advantage which existing retailers had, was eroded away. The consequence of that, I think, is that those retailers had to give up part of the value, which they thought they had created, probably in terms of the prices that they could charge; it became less profitable operations overnight. Now, for every loser, there's also a winner, so you could argue that the consumers won and consumers received more value because now they can get the same CD for less money. But, as I say, from the corporate perspective, there has been a reduction in value which I am provocatively positioning as a destruction of value as a result of the Internet arriving; probably of the discontinuity which that created as well.
2. **GS – Actually, my objection – my idea on that, is that it always boils down to perceptions; how you treat actually the Internet; if you see that as something that is going to replace things, something that is going to be there 'instead of', then definitely you're not exactly on the right track. And the thing is that, just as with any technology, - and this is actually what I am investigating: the implementation process and how this effects conditions in the company – if you take it right from the beginning then you got it right to the end; and no one actually could take it right from the beginning because it is an area of uncertainty, so you have to actually guess. But, yes, destruction of value is something that exists; you *can* say it is somehow one of the reasons for the dot com boom and bust as well.**
3. AH – I have this synopsis that you kindly sent me, but please feel free to fire away and I'll do my best to answer your questions.
4. **GS – Right. First of all, how much time do you have?**
5. AH – I was thinking in terms of an hour but if you need more, I can stretch it. How long do you think you need?
6. **GS – I think an hour would be fine, but if I keep firing away, I think we'll never stop. {laugh}**
7. AH – Let's try and work to an hour; if we find we're still going strongly after that, I'm happy to stretch it a little.
8. **GS – That would be great. I remember that you had the chance to read the transcript I sent you from our previous conversation; things that have been touched on that time were the history of Internet banking in Royal Bank, strategic issues, I remember asking you things about ISPs, things about threats, strategic infrastructure decision making, banking systems and finally account aggregators. What I wanted to get into in more depth now, is some deeper levels in the process of decision making and implementation of projects and investment appraisal, which actually I don't know if I can call it 'Investment Appraisal', because I am looking at the whole area of the evaluation, which can be financial, strategic, anything indeed. So, let me start from the decision to do Internet Banking: Once the Royal Bank has decided to go for an Internet Banking project, there definitely had to be a number of**

projects competing to each other. You also mentioned in the last discussion that it was a key strategic decision; something that you had to do to stay in business and so on. Getting to the issue of competition between projects, is it that case that these projects were competing only to each other within the IT budget, or were they competing to other capital investments as well?

9. AH – It certainly is, yes. I think, in any large organisation, you will inevitably get conflict across the whole range of possible projects; and to that degree, I think that there's a big role for the Strategy function in any organisation to say 'directionally, where do we think we want this organisation to go?' I think here, the case to add this channel was so strong, that ultimately the business case was overwhelming. *But*, Royal Bank was – if I take the Royal Bank Group, and if I refer specifically to Natwest – Natwest was actually very late in taking its business online. And the reasons for that were strictly about competition for investment. There's quite a conflict, I think, between investments which you wish to undertake for strategic reasons and which might not bear fruit for some years, and projects which will give you a much more immediate and obvious payback. It is very difficult to be scientific about how you choose between those. And I think ultimately it is just judgement. The guiding force for this organisation is its Board of Directors, and ultimately that Board of Directors does take a view on the shape of the technology portfolio from year to year. Those decisions, those directional decisions are – and I think this is quite right and proper – taken at that most senior level. I often say that the long term is only a series of short terms, so there is no point in continually investing in things which aren't going to bear fruit for 5 or 10 years. You know, you have to pay the wage bill. {laugh}
10. **GS – What you have just mentioned is just typical of IT projects.**
11. AH – Absolutely yes. And particularly difficult I think there, as it was with e-banking in the early days, most of the investment was infrastructure. So you had to make a pretty heavy investment in infrastructure without necessarily believing or knowing that you would get a strong return on this. I think the more established it becomes, the less it costs to make each incremental change in general terms. And the more certain you are about the outcome which you're going to get – because you have more evidence on which to base your predictions. So I think the future decisions get progressively easier, up to a point; but the initial decision is the tough one, because you know you are going to put a lot of money into something you can't necessarily predict what the return is going to be, you don't necessarily know that you're going to do it well and therefore there's quite a high risk in doing it. But ultimately, sooner or later, as with Natwest later, you're just forced into doing it. You get similar issues around those infrastructure projects, you know, at what point is it right to repaint your branch network for example? And what is the return on that going to be? Well, you can't measure any of it. So it simply becomes a judgement. But yes, there are conflicts. But those conflicts, we seek to resolve from a strategic standpoint. And we seek to get a balance in our investment portfolio, such that we *are* moving the business in the right direction to be able to capitalise on future demands, whilst at the same time doing things which are going to pay the wage bill and the dividends in the short term.
12. **GS – So this issue of competition, it's not an issue of strictly the IT budget?**
13. AH – No it's not. You have to think about what the IT budget represents. Does it represent the number of people you have available to do a job? Well, I think in the old days, when we all had proprietary systems, that's exactly what it was. You had an IT workforce of, I don't know, a thousand people, for the sake of argument, and their wage bill was 10m GBP a year; so your IT investment was 10m GBP. And that was it. You could flex that slightly because, by the time you'd find someone and trained him to understand your system, that was a long process. I think, in the



modern world, most systems are much more open; and it is much easier to outsource development, if that's what you wish to do. So I think that the amount of resource that you can bring to bear, is almost infinite, therefore you are now deciding 'how much is it right to spend on IT investment?' Or any other facet of our business in a given year. And again I think that's a strategic decision; and it's a decision which, in this organisation, will be set at Board level.

14. **GS – One thing that you now find in many organisations is that usually this IT budget thing is more a political issue rather than a strategic issue if you know what I mean. Is this something that you came across, or is it something that you have to face? Because what you are describing is what I would call a more organic approach to the issues. 'We are an organisation with this strategy; we are flexible as to how we use our budget'. But in terms of the different departments, if you like, and how they put down their projects and how the political issues influence the decision making...**
15. AH – I think it *can* be political; it depends very much on the character of the individuals concerned and I think it depends greatly on the culture of the organisation. So, in Natwest, it was very heavily political and individual directors would fight over what at the end of the day were quite trivial decisions, because it was a part of the posturing whichever one expected them to do. Even if someone gave up a completely irrelevant project, they wouldn't be congratulated for thinking in corporate terms; they would be convinced of having given in, in some way. I am very pleased to say that RBS is not like that. The Royal Bank approach is very consensual. Here, within the e-commerce team, we create budget and we manage projects on behalf of many other parts of the group. And there is rarely, if ever, any conflict over how big those budgets should be or which projects should gain priority. The style is much more consensual; the nature of the board is, I think, much less formal than you would find in other organisations as well, and there is a great deal of informal discussion that goes on outside of the more formal Board meetings. So, the interesting thing to me is that after more than 25 years in Natwest, my experience had always been that budget decisions were quite adversarial in their nature. And it was a very pleasant surprise to me, to find that it didn't have to be like that. So it is really driven home to be how important the culture of an organisation is, which is a very soft thing to define; and even harder to influence. But how important the culture of an organisation can be, in its development of its profitability.
16. **GS – Yes that's really important. Now, going back again to the process of approval of projects and so on, how would you describe the process of approval? Is it something that goes through linearly through separate departments? For example, first the business case, then go through the IT department and then the Finance department, and then the Board and so on.**
17. AH – I think, largely, it *is* actually, yes. But just to describe the process, at least in its main components, we'll always start with the customer proposition; 'what is the value that we are trying to create for the customer?' And 'what makes us think that enough customers want to pay their money for that value?' We'll always start there; we will never start with 'well, as a bank, there is a part of our business over here, which could be extended...', we never started from an *internal* perspective. We will start from the *external* perspective. From there, we'll very carefully build up the customer proposition, always in touch with the customer himself – so also constantly researching and refining that proposition, until we have something which we know is as good as we're going to get it and something which we know that the customer will buy in the first instance. And having done that, we then turn that into a technological specification; so, 'what do we need, or what components do we need to buy, to turn this into an operational process. And then we'll cost that. So, from our customer work, we have a pretty clear idea of the income potential. From

our technology specification and our business process specification, we'll have a pretty clear of what it is going to cost. Naturally, we'll always have a better idea of what it is going to cost than the income that you're going to derive, because it's much easier to do that. And then, we will start to bid for a budget to carry that into effect. By and large, the budget process here is an annual process. So, budget 2003 has been bid for now, and therefore if we were to decide that we wanted to develop another proposition in 2003, it would be quite hard for us to do that; so it is quite a slow and laborious process. One reason for that, by the way, tends to be the scale at which we do things, so most investment decisions are significant. In most cases, we are talking about investing several hundreds of thousands of pounds as a minimum, because of the scale of operation that we have here. So, that's the real reason why it is such a long drawn-out budgeting process. We will then go through the prioritisation process at a group level, which I discussed, and ultimately the Board will take a view that investment should be channelled-in a certain direction, and the bid that we have made will be – in principle - accepted or not. Assuming it is accepted, then when we're ready to make a start we will put together the detailed business case, which will then be put through the Finance function who will do Due Diligence on it. So, they will say 'yes, we do believe that it is possible to make this financial return' or 'no, we don't'. They usually say yes. And they will also say 'and we believe that this will give us acceptable return' and generally, they're making sure that we have thought about all the issues and there isn't some fundamental defect in the proposal, which will seriously damage it later. And after that, that detailed proposal – assuming it's of any scale, and they almost always are – would again go back to Board at a detailed level. And we would say 'this is the detailed customer proposition; this is how we think the market will react to it and therefore where we will derive volumes from, this is what we need to spend to make it happen and this is what we are going to spend the money on; here is the plan – just a very outlined plan – to take it to the marketplace, and we will carry out the following 10 steps to go into the marketplace'. And the Board will take a view on that. So we go through some kind of outline process first, which allows the Board to take the strategic decisions, and then we go through a detailed process to allow the Board – or sometimes if it is a small project, it will just be the Board Director who heads that particular business unit – to allow them or him to be able to take their decision on that individual project. And once that has happened, then - all the time we are trying to coordinate with our colleagues in the IT function – once that happens then typically we will start work quite quickly, in terms of doing the technology building itself. But it's quite a job, because this is a big organisation; this organisation employs about a 100K people, this organisation is worth more than Ford and GM put together; so everything is done at scale. And I know, talking to people particularly in small businesses, they don't understand why it would take us sometimes 2 years from validating the initial concept to getting it into the marketplace. It is that scale of operation which drives that. You know, you only want to do this once, and you want to get it right. {laugh}

18. **GS – Right. You spoke about developing the business proposition and the technical spec. then moving into the financial proposition. Is there a feedback loop there? Because, I mean, the way that I would see it is that the finance team would apply some kind of financial techniques on the proposition, which actually comes down to the separation of CBA to identification of costs and benefits and their evaluation. Since all these methods are some kind of 'garbage-in, garbage-out', what is the relation of those things to the business case? Is there a formal feedback?**
19. **AH – There is. I mean, in the formal process, there's a feedback loop. Because though the process tends to take so long, you take it to the finance function in an informal way much earlier. That is just something that people do. If you like, it's a practical trick that they have learned, so that when you get to the formal appraisal, you will pretty well always get a tick in the box. Because you've had your**

conversation earlier, you've taken heed of the Finance function's view, and you have built that into your proposal as you go along. So whilst there are some drawbacks in the relatively long investment appraisal process we have, we *have* found ways of shortcutting it. {laugh}

20. **GS – So, that actually gets me back again to another issue, expert groups and empowerment and politics, which this time relates to the Finance function, which sometimes can be seen as a filter through which you promote or you reject projects. And this can be highly sensitive. Is it something that you came across or you had to fight against in the past? Is it something that was developed smoothly?**
21. AH – I think we have the Finance function integrated pretty well into the business, though each business unit – ours included – has a finance manager, an accountant if you like. Whilst his primary reporting line is to the unit boss, he does have a secondary reporting line into the Finance function. Now, in this organisation, and I think it's fairly usual, Finance has a dual role: First of all, it does have a role to protect the numbers. But it also has a role about risk management. In consequence of that, the Finance organisation tends to be a part of all the relevant decision making bodies. And specifically in the product development work. So, whenever we are running really any piece of product development we always put a project board in control of that. And one member of that project board will always be a representative of the Finance function. Naturally, their job is to make sure that we have turned over every stone and that there isn't some flaw in the proposition. Generally speaking, and I think this is again a cultural thing, the Finance rep does see themselves very much as part of that team. And they see their role as facilitating the project to a viable conclusion; they don't see their role as one of raising objections.
22. **GS – So it's actually like spreading the Finance function across teams and so on?**
23. AH – Yes. Well, they see themselves as a facilitator and not someone who should object. Of course, if they identify a flaw, a barrier then they will raise that issue; but typically they will try and work *with* the team to overcome that barrier; naturally, if the barrier can't be overcome, it's still their job to blow the whistle. But then, by that time, the rest of the project team has agreed that it is not worth going on. I have to say, I've never been in that situation where we had to stop a significant project because we have suddenly found a barrier. It's much more typical that you find issues and you have to find your way round them. But the Finance function does have a theoretical role to stop projects if they believe that they are not going to make their objectives.
24. **GS – In relation to the culture of the organisation that you mentioned, the culture of a financial institution one where by definition Finance is a core expertise. Do you feel there is any difference in the role of the Finance function between such an institution and, say, General Motors?**
25. AH – I don't really think there is actually; you see, I draw a distinction between an accountant and, say, a relationship manager that might be lending money. Clearly, a bank is all about finance but I think its core business of lending money or making payments on behalf of people, is very different from the role which an accountant may have. So, certainly there is free movement between this organisation and other organisations within the UK, at the Finance function level, so I see people come in from other organisations; I don't see them behaving differently; and let me qualify that: by and large, they have the same kind of mindset as the people who already are in our Finance function; they might behave differently because they come from an organisation with slightly different culture, but, by and large, their



thinking is very similar. So, I've no reason to believe that the Finance function in RBS behaves markedly different from the Finance function across, say, the FT100 companies. I wouldn't have thought of that being the case.

26. **GS – Right. One thing that actually crops up around this issue is – and I am going back again to power residing within the different parts of the organisation – regarding Internet Banking and IT projects, is there a specific area where the power residing has a strong say?**
27. **AH – Right. Power always resides with the customer. And therefore, within the organisation, power will almost always vest with the customer representative within the organisation. So, typically, the marketing team for that particular group of customers. I say that because they are the people who will own and be responsible for the profit-loss account for that particular group of customers. Naturally, everyone's eyes are focused on the bottom line of the organisation; we want to improve our actual performance we want to grow the organisation. And so the people who own, for example, the PLA for the retail consumer or for the small business customer, who are the ones who take the decisions on what services we should offer and how we should price them, and are therefore the ones who, more than any other, influence the financial fortunes of the bank; so, they are the ones with this power. Now, has the advent of the Internet changed that? I think the answer is 'no', and I will qualify it in a moment. My view is that the Internet is a channel to market. It's not a service in its own right. It has changed the nature of the relationships between the bank and its customers, but it's still a channel; no one comes to us and say 'I want to purchase Internet access'. They come to us because they want a credit card, a personal loan or whatever. So, it's still the same product range; you just have a different means of getting them to the customer. What we have done, and I think rightly and successfully then, is that we have taken withdrawn lessons from the way which we manage other channels, and I'm talking in terms of the telephone and of the high street network; and we've said 'well, we don't want separate channels into the consumer market and into the small business market and into the student market and etc. We want to manage this as a single channel through which we can deal with all those groups'. And the trick will be to manage the process in that holistic way. And that's the job that this team here [Strategy & Research – E-commerce & Internet] really has to do. The team here will not tell the consumer market people what products they should be selling through that channel. What they *will* do is tell them how to sell most effectively through that channel. And they will also take those little headings and they'll put them into other markets. Such that we have, it tends to be a very efficient and a very homogeneous service into the marketplace. So you can touch this anywhere, and you should get the same response. But I don't really think that's a power shift at all. We had, and still do have, people whose job it is to make sure that the branch network is functioning well, we have people whose job it is to make sure that the call centres are functioning well, and then we have people whose job it is to make sure that the Internet service is functioning well. There is a slight shift but that is not a wholesale change in the power base.**
28. **GS – I see. Going back to the core issues of the Investment Appraisal, I'd like to talk a bit about the costs and benefits and their measurement. My idea, in general about all technologies is that you have tangible and intangible costs and benefits; whereby, in my view – and I would like to ask your view – tangibles are ones where the real problem is managing uncertainty, whereas intangibles, well, you can see them as a source of uncertainty. Things that you are trying to assign some value to; not necessarily monetary value, any kind of justifiable value; so, regarding my statement on intangibles, what is your approach there?**

29. AH – Let me come at this from a slightly different perspective, and if it doesn't work we'll try again. Thinking about the way which we run Internet Banking, and I'd say first of all that we have some budget which we call 'Fix on Fail', by which I mean, if something breaks down, then we have the money and the people available to fix that on the spot. We make no attempts to cost-justify that. If we have signed 1m customers for Internet access – for Internet Banking rather – and that Internet Banking service fails, we must fix it. It's a matter of reputation; it's a matter of service. So, as I said, we make no attempt to cost-justify that. If it fails, it must be fixed. We then have a pot of money which we call 'Keeping the show on the road' where we do have some choices but we don't have many. So, let us say that there is a change in interest rates. Well, that will be an example where we simply have to show a change in interest rates on the Internet Banking system, so we have to spend some money to do that. I'm trying to think of areas where theoretically we would have a choice on whether we do it or not, and I can't really think of one. But there are areas where sometime we could argue that we don't actually have to do this; there was no regulatory or legal reason why we would need to do it, and therefore theoretically we don't need to spend the money, but we always do. And then, there's a third category of expenditure, which is around genuine changes to that Internet Banking service that you're making because you think there is a financial benefit in so doing. I think, once you're at that level, you can't start to make judgements about the return that you would get on that investment. It might be, for example, - a current example – we sell a lot of insurance products online; we have through Direct Line a PET insurance service; currently it's not available online, but it will be soon. You have choices about whether you think it's worth money on throwing that service electronically or not; you have to spend a certain amount of money to make that possible. Generally speaking there, you can get a pretty clear view of how successful it is going to be. You either get it because you can transpose data from your experience of selling over the telephone, which is what we can do in this case, or you can simply ask people through market research how likely they would be to buy such a product online, and you can get some pretty good data as to whether it may be successful or not. So, you have a range of budget priorities; at one end of the spectrum, the decisions are easy because you have to do it, or you're out of business. At the other end of the spectrum they're considerably more difficult. Not so much in terms of making predictions about the individual returns that they will bring in; it's more around prioritisation: which ones are likely to be the most successful. Did that answer your question, or did I come from a different angle?
30. **GS – Yes, it answers my question. So, in terms of taking account of this kind of uncertainty, within the Finance function, is that actually translated as risk? (this is actually a different question) – is it actually translated to a higher hurdle rate? Or is there a direction towards using other kinds of methods?**
31. AH – You know, I don't really know. In the formal model, we use the same return thresholds irrespectively. In the formal model, we don't make any attempt to assess the risk.
32. **GS – So, there is a centrally prescribed, say, hurdle rate, which you're trying to reach regardless.**
33. AH – Absolutely. And the model simply requires you to put in your estimates of cost. If they're right then, it doesn't mean that you certainly got priority but it does really say that it can be prioritised. Typically, what happens of course is that, if you don't think you're going to make that hurdle rate, then you find some other means of improving the profits or reducing the costs until you do. But it's a valid point; I'm sure that in reality, the people who are doing the capital appraisal will be modelling risk. I've never got involved in doing that.



34. **GS – Again, going back to the Finance function. When you're trying to put a project forward, you may to tweak the numbers and so on. Is that something that happens regularly?**
35. AH – Sure. I think the thing you have to bear in mind is that you're putting this proposal forward, you're going to get your Board Director to sponsor it, and he is going to take it to the meeting of the full Board, and he is going to say 'here is a proposition which I am recommending'. The quid pro quo of that is that you and he are signing up to deliver that project and to deliver the numbers that you've agreed. Now, it's not quite black and white. If you don't deliver them, you know, we'll accept that we can't predict the future; so if you don't deliver them, that stops the sacking effects, but on the other hand everyone will prefer to deliver them.
36. **GS – Yes but in terms of putting it forward, you may want...you know; you have a rock-solid proposition but because it's an IT project, it's uncertain and the costs may be very high, whereas the Payback, to put it simply, can be very long. So, you may want to somehow convince the rest of the bunch that this project has a solid ground for going forward, and if you can, bring it to an end. Speaking of the Finance function, if you think that there is much value in doing the project but your NPVs are not as good, then you may want to [make them appear good]. What I am talking about is the use of Finance as a convincing tool, rather than as an appraising tool.**
37. AH – I do understand that; sure. First of all, to come back to my earlier point, what I was trying to say was that when you sign the business case as the programme manager or the sponsor, you are committing yourself to deliver the benefits. So, in other words, no one would seek significantly to inflate the benefits to get it through the hurdle, because you're just putting a big noose around your neck. In terms then of debating with the Finance function, bear in mind that this has almost certainly gone on from the very inception of the project. So, you're not suddenly taking something to them, which they haven't seen before. If it was a complete non-starter then it would have failed in a much earlier part of the process. Following the perspective there, we know very well what the hurdle rates are; we know very well what is expected of us as product managers and as project managers, and so equally we wouldn't start to take forward projects that weren't going to offer an acceptable return. So, I think it's only at the margin that we are going to get it to a head-to-head debate with Finance. And in practice it hardly ever happens. And when it does, it's not an adversarial think; it's like 'well, look, you know, I am the Finance guy; I've got to put my signature on this document; I'm not absolutely convinced, so, let's talk about it; you help to convince me'; that's the deal. And all the time, you're coming back to the assumptions that underpin your business case. The numbers are just a convenient way of representing; how many customers you think you're going to get, how much you think you will you're making them pay etc. So, personally, I am always more interested on the assumptions than in any other part of that business case. Because, if the assumption is, for example, that you have to reach 120m consumers and you know that the population of the UK is only 60, then you really are never going to do that; you know {laugh}. I was doing some work on mobile commerce the other day, and I produced some assumptions of my own to suggest what the total size of this particular service might be in 5 years time. Then I just checked it back to the today's population of mobile telephone holders. In fact, my prediction was that we would represent 1.5% penetration in 5 years time; I felt very comfortable with that. If I'd said that it was going to be 50% penetration, I would have thrown it out and start it again. And the Finance function is working to this basis too; so, 'let's go through the assumptions: how reasonable they look. Have we got a core proposition? Have we got some market research or some other indicator that says that people generally like this? Then, can we calibrate it? Then, do the numbers hit the hurdle rate?' If all those three things are present, it's unlikely that we're going to reject it.

38. **GS** – Yes, I see the whole idea. Now, moving on to assigning values to intangibles, there are certain things I wanted to discuss. There are certain aspects that I would like to see whether they are being taken account of. Things that can be, in a way, considered uncountable; things like, for example, customer satisfaction, which can be attributed to Internet Banking. I remember in our last conversation you said ‘we are measuring customer satisfaction with the bank as a whole rather than separately for Internet Banking etc. Things like trust, in correlation I would say to security costs and benefits. Things like error minimisation, rationalisation of systems integration, rationalisation of workplace, you know, the effect of penetration of Internet Banking in the way that the branches are made; things like quality of work, customer recruitment, structural changes and so on. Is there a formal or, if you like, informal way of taking all these things into some kind of tangible account? I am talking about contribution of Internet Banking, or any other IT project, to value.
39. **AH** – We operate a balanced business scorecard approach. I have to say that we only operate it at quite a high level. But we do operate it. [AH goes to the whiteboard] And clearly, what we’re trying to do is get the right balance where we’ve got the customer satisfaction, which we’re trying to measure from probably half a dozen different perspectives. Generally speaking, we are trying to measure customer satisfaction with the overall service that we provide, of which e-banking is a part. We’ve got Finance up there [AH draws a diagram]. So, how good are we in running this organisation and what kind of profits are we making? We’ve got organisational development here [AH draws on the diagram]. So this is all about trying to balance the long term and the short term. The easiest way to do this is to charge everybody a fortune, you know, no service whatsoever, don’t develop anything for the future and so on. {laugh}

<b>CUSTOMER SATISFACTION - STAKEHOLDERS</b>	<b>FINANCE (£) (SHAREHOLDERS)</b>
<b>ORGANISATIONAL DEVELOPMENT</b>	<b>STAFF DEVELOPMENT</b>

40. And then we’ve got...I’ll call it ‘Staff Development’, so, what are we doing to make sure that they...the third estate if you like. This is one group [AH points to the Finance quadrant], let’s call it the Shareholders, Staff is another group, and what we’re doing, I suppose the fourth estate is the organisation itself. So, thinking about the way in which we would measure customer satisfaction, as in any other area, we set ourselves targets; for example, we want to know that 95% of our customers

are either satisfied or very satisfied with the overall service that they receive; and we ask that question regularly. We also ask them questions about those facets of service which we know are meaningful; so that we can get to work on the 5% who aren't satisfied; why are they not satisfied, what are the issues which are causing them some dissatisfaction, can we close those down. In terms then of translating that into value, that becomes a judgement. It is almost impossible, in my experience, to say 'if we could raise customer satisfaction from 9 to 9.5 then we would raise profitability by a certain figure. To me actually, it's much more important that we do two things: firstly, you want to be benchmarking your levels of customer service at least at the same levels as your competitors. If your service levels are markedly worse than your competitors', you should be concerned about it. Naturally, if you can get them above your competitors and you can do that without spending too much money, then that is a valuable thing; but broadly you would be benchmarking at about the same level as your competitors. Secondly, you want to see customer satisfaction – indeed any of these measures – rising, however fractionally. You don't want to see it falling. If customer satisfaction is falling, clearly something is wrong. So, you're trying to measure this, you're trying to get a sense of direction, and you're trying to benchmark to the marketplace. But I think it's virtually impossible to turn that into a benefits account.

41. **GS – Right, I see. I was also thinking about using knowledge coming from the usage of that channel...**
42. AH – Yes, I see what you mean. We can almost wrap that into another question you had about Knowledge Management. We certainly have much more knowledge of what are customers do now than we used to do. Twenty years ago, we decided that the role of the local branch manager should be rather more than lending money and persuading people that they should get a loan; in other words they should have a sales function. The snag was that we had no idea what products and services each customer had. And so we created an index card for every customer and on one side of it there was a grid where on one axis it had all the products we had, and across the top there were boxes for dates; and you were supposed to write, you know, '28 June, I offered him a credit card'; tick in the box. And then we had a whole pile of hieroglyphics, which told whether we'd offered it once or twice, he'd taken it but he 'd given it back, you know. It was a complete nightmare! {laugh} Millions of these cards! And even then, of course, you couldn't aggregate all that data because it was all on just bits of card.
43. **GS – Yes; that's something now called CRM {laugh}**
44. AH – Absolutely. That's right. And I am sure that at the time, it was thought to be the height of sophistication. Clearly now we do have much more information, and because we hold it electronically, we can therefore manipulate it; we can learn much more about our customers' behaviour than it used to be the case in the past. And we're fortunate also in that we do know who that customer is; so we're not in the same position as many retailers who have no idea who have no idea who the people coming through their doors are. We do know exactly who they are, we know how old they are, exactly what post code they live in, who they work for, what their monthly salary is, we have much more information than a retailer would have. How do we use that data; well, I think we're quite sophisticated – we would always like to do better, but I think we're quite sophisticated – in the way in which we do aggregate that data and seek to relate all that to behaviour. I think we're quite sophisticated in the way in which we create what I call 'customer templates', so, let's say that we want to define a good mortgage prospect; we *can* create a template for a good mortgage prospect quite straightforwardly, by looking at the last 10,000 people who took a mortgage. Having created that template, then we can pass that across the rest of the customer base and we can find that group of people who are most likely to be by their mortgage in the next 6 months. And we

can then use that as a marketing database, and we can target them. To be fair, that's not really a product of Internet Banking; that is simply the product of automation of banking, generally. The great thing about Internet Banking is that, instead of having to get a message to 2 or 3 thousand relationship points out of the network, you can work on it all from here. So you can change the messages that you are giving to your customers and the way in which you're treating them in terms of services, sales offers and everything like that. You can change that very much more quickly and very much more cheaply than was the case in the past. What we haven't – and I don't think anyone has – done is to go on to really tailor that to specific and individual customer needs; but I can see how you would do that over time. So, no two customers would be marketed to in the same way. That is one of the huge dynamics that the Internet has given us; we can genuinely do – not merely mass customisation – but you can get to 'markets of one' I think is the suitable word to call it. We don't do that today, but I think what we do do is tailor our offering much more successfully than was the case in the past to individual groups like, for example, mortgage seekers, students, young adults; much tighter groups of customers than we used to identify in the past. Because we *have* the data, and because it is much easier to segment it than it used to be when we had these cards.

45. **GS – Do you see that the Internet has a way for doing that actual 'markets of one' personalisation?**
46. AH – I do, yes, absolutely. I think it is economically viable to do that. It's interesting, and my colleagues at Virgin Direct in Norwich, actually allow you, the consumer, to define your relationship with them through the Internet; and I'll explain what I mean by that. The Virgin service is a so-called 'Current Account Mortgage'. Now, what that means is that you have a single account, which has a whacking great credit limit on it, and you run all your affairs through that single account. The benefit is that, because typically you're offsetting some part of your mortgage with a part of your salary, you'll repay your mortgage more quickly – and that was the basic proposition. It has moved on a long way since then. People, though, were a little bit nervous about that, because, you know, imagine having a credit limit of 200K GBP on your current account. {laugh}. Apart from anything else, it would be pretty depressing opening that statement {laugh}. But people felt that they weren't sufficiently well disciplined to move that mortgage down with accord to their hopes and aspirations. So, what the guys at Virgin have done, is that they've built a what amounts to a veneer on the front of that; and you can say 'this is my current account, this is my savings account, this is my car loan account, this is my house loan account'. Behind it, it's still a single account, but they allow you notionally to segment that into different accounts. But the beauty of it, is that you can segment it in such a way that it is unique to you. If you want 5 savings accounts because you want one for Christmas, one for holidays, one for a car, one for your child, you can do that! Now, that is the best expression I have seen of developing markets of one. Have a look at the Virgin Direct site, because, to me, it is the best example of developing a market of one that I have seen. It is by no means perfect, but it is a good step along that track.
47. **GS – So it offers you an example of good use of that personalisation through the customer interface.**
48. AH – Absolutely. So in that context you don't really have to work out what the customer is looking for and give it then to him. You offer him the toolkit and say 'you can create it yourself'. You couldn't do that in any other environment.
49. **GS – Right. That is very interesting. So, that is one of the features. Relating to other intangible ones that I was referring to, like trust and how you measure it etc. One proxy, well, not exactly a proxy but something I came**



**across, is using security benchmarks as an indication for attracting trust rather than measuring trust. What is your take on that?**

50. AH – I think, in the broader commercial world, trust is something to be earned; and indeed it *is* in the banking world. But I think that people tend to trust their bank more than they would trust other commercial relationships that they might have; and I think that they have been doing so for much longer. The example I have to talk about is trust in the use of the ATMs, where many of the issues are the same, where – for whatever reason – phantom withdrawals *do* take place, and we have to resolve them. By and large, we treat that as a cost of being in business, and as the premium we have to pay to earn the trust. We certainly *do* want people to use our ATM network, we certainly *do* understand that we have to ensure that they trust that service very strongly, and therefore we have to accept that if someone comes to us and say '50 GBP disappeared from my account last week and it wasn't me', then, unless we have some very good reason to disbelieve them, we refund the 50 GBP. Actually the cost of that is tiny in comparison to the benefits we have with automated cash withdrawal. By and large, the same principles apply in this world too. But because Internet Banking has been around for a much shorter period, people still are mistrustful. They haven't quite worked out what the issues are. There's a great Dilbert cartoon in which – I forget her name, but whoever the woman is with the triangular hair – is in a restaurant; and she's talking to her dining partner about the risks of giving out credit card details over the Internet. And in the first frame, she's handing over her card to the waitress, then she talks about how dangerous it is to do things on the Internet; in the final frame, the waitress has come back with the credit card and was wearing a fur coat. {laugh} You are much more likely to have your credit card details stolen in a restaurant than you are on the Internet. Much easier to do; if any frauds person wants to do it, that's were they're going to start; they want physical possession of the card, and it's much easier to do that than scan the Internet for the individual data packets, which may be going all sorts of different directions; so, it's a perceptual thing; that's what I'm trying to say. Now our standpoint on this is very clear, and that is, if you tell us that a transaction you have originated over the Internet, either through your e-banking service or using your credit card was not yours, then we will immediately refund your money. That seems to me to be a very clear message to the consumer: 'We will immediately refund your money'. It's very similar to the pledge we have on direct debits. If you say to us that you have been wrongly debited then, irrespective of the nature of the transaction, we will not question that at all; we will completely refund your money. That probably means that you've got a problem with, say, your gas company. Similarly, if you report something over the Internet using your credit card, and we refund the money to you, we will claim the money back from the retailer; so if it was you, then you have the goods, and you've got a problem to sort out there. But, from our perspective, if you tell us that something has been removed from your account without your authority, we will immediately refund you. Now, in a way that's making a virtue out of necessity, we have no means of proving it was you; there is no legal way in which we could hold you to that transaction. But, nonetheless, I think it is a means of reinforcing trust with the customer. Now, people are working on this, so, over time, we will see digital signatures arrive, we will see digital signatures on credit cards, for example, you know, when you come to make a payment over the Internet, you will put your credit card into a card reader on your PC. At that point, I think we can switch the relationship, so, at that point, if you said 'well, that wasn't me', we'll say 'oh, come on, it was your card and it was your PIN, so it was you'. And I think that we can build the contractual relationship around that. But, whilst I think that makes life easier for us ultimately, because it does give us some proof that it was you, I think that trust, just as it's happened in the ATM market, comes with some very strong offers from the banks themselves, coupled with experience. And I think that when people understand that there is nearly no risk to them whatsoever, a lot more there isn't any hassle. People will trust the service and, at the moment, I think that what people are telling



us is not that they distrust the service, it's just that they haven't really had the experience, so they're not sure. I don't know whether you've ever had an occasion like this.

51. **GS – Yes, I had a credit card charge, which was not actually fraud but a mistake from the retailer directly.**
52. AH – Right. I was going to say I had – again it wasn't fraud – I bought some cinema tickets over the telephone actually, rather than the Internet; It was one of those deals where you go along to the theatre, you put your card in the machine and it prints the ticket. There was clearly a fault with the machine. When I got my credit card statement, I had been charged for the same transaction actually 4 times {laugh}. I didn't make a fuss about being a member of staff, but I phoned the credit card operation and reported the problem. A bit of a joke about it, 'here's your money back'; actually they gave me all 4 lots back. But it really was a very simple transaction. A very friendly transaction; there were no questions asked, not even said 'are you sure?'. And I think that, as people move through that kind of experience, their confidence will build and their trust will build. But I don't think that people are genuinely distrustful in the sense of being suspicious. I just think they don't know, because they haven't had the experience.
53. **GS – Right. The other thing, regarding again this list of intangibles, is how do you measure – if you measure, or if you *can* measure – customer recruitment versus customer cannibalisation? Because this *is* an issue.**
54. AH – It's a nightmare, yes. It is almost impossible to do that.
55. **GS – Is it something that's based on statistical assumptions? You know, things like '1 out of 10 customers who walked into the branch did this' etc. This is also specific to Internet-only products, which is another area I wanted to discuss. I mean, if you are making what is very typical of nowadays, an e-savings account, which for example, Natwest and Bank of Scotland offer, just as many more; you have a higher interest rate account which is Internet-only, that being the case for cannibalisation. Do you measure these?**
56. AH – It's really hard to do actually. I *have* tried to measure it and it's very very hard to do. Because, you know, money flows between savings accounts and current accounts, in such a way that...it's the same as saying 'when the tide comes in this evening, is it the same water that came the last evening?' {laugh}. A number of perspectives on that: first of all, why do we offer an e-savings account with a relatively high rate? Well, the answer is that because we're trying to compete. First of all, the Royal Bank will never have the best interest rates in the marketplace. That will be impossible, because smaller institutions only have that lever to pull. So, even if we put our savings rates up to 10% today, I can tell you now, that the Scarborough Building Society and the Portland Building Society will have their rates at 11%. Because otherwise they're out of business, and they just find some way dealing with that, you know. We want to be competitive. And we want to retain as much of our own customers' money as it is reasonably feasible to do. So, we've taken the judgement on that e-savings account, unaware that we should pitch the rate; and it is a judgement; it's not scientific, it's a judgement. How much of that money would have left the organisation had we not put that in? We don't know; we've no idea. How much fresh money came into the organisation as a result of that? I don't know. No idea. How much of that money came from other accounts which were earning which were paying less interest? I have to say we don't know. It is very very difficult to track these things, and I *have* tried to do it in the past, I've even tried to do it by going face to face with customers, and you still get answers which are so confused that it's difficult to give the position. So you say 'where did this money come from?' – 'Well it came from my current account' – 'Yes, I know

that, but where was it before it was from your current account?' – 'Well, I had it with Abbey National' – 'Right. How long did you have it there?' – 'Maybe six months, maybe three weeks'. Everyone is so different. So, in fact, you're tackling it from a different perspective and you say 'what is the cheapest way for me to fund the RBS' book? Well, the cheapest source of money is current account balances where you pay broadly 0.1%. But in terms of attracting money, the cheapest source is obviously the retail market. Clearly, every day, we are borrowing on the wholesale money markets at very close to base rate. So, it is a judgement, but we can afford to pay, rather safely, high rates of interest, in order to capture consumers, and still do better than if we were funding our book only through the wholesale markets. Interestingly also, particularly whilst interest rates are so low, inertia is so high, that isn't actually that much movement; when you launch a new product, like the e-savings account, there is an immediate movement of money to be caused by something fresh, something for people to respond to. Interestingly, during the first few weeks of that new savings account, well, we use to look at almost every transaction; there are individual deposits of 7-figure sums. They moved into that, which will make a huge difference on the overall. Today, the net movement in that account is not particularly great; it is still growing, but it is not particularly great. My expectation is that, sooner or later, it will peak, and then, over a period of time, it will wither away.

57. **GS – Are you talking about take-up rates?**

58. AH – No, volumes of money; the overall size of that pot. And that is a natural product cycle; people just get bored with it; they're attracted to go to other accounts, to other savings institutions; they're attracted by new features, new benefits etc. So, it's a very natural product cycle. Clearly, this is not all new money; but working out what *is* new money, is – as I said earlier – as difficult as working out which of the water that comes with the high tide tonight is new; it is not even worth trying. {laugh}

59. **GS – Right. I see. Coming back to identification of costs and benefits again, from your previous experience, which ones would you say are the most important costs and benefits in Internet Banking that were initially left unnoticed and were noticed later on, in the process of implementation? What are the two or three ones that come in mind?**

60. AH – In terms of **costs** then, I don't think we understood very well at all how customers would relate to the e-banking service in the first instance, and therefore I do think that we tended not to present it as well as we could have done and therefore, we incurred cost as we re-engineered that to make it better. In the early days there was a feeling that you should have lots of gismos, amusing toys, on there, that would make people feel good about it, whereas, in fact, what people want is a service which is very plain and simple, which delivers them some relatively straightforward core information – the kind of stuff they want to look at frequently – and, above all, something which they can get into and out of very quickly. What we got wrong in the first instance was that we put too many bells and whistles in the service, which actually irritated people, and which actually slowed the process up, because we were asking people to click through an extra screen, so that they could see some amusing device. Well, and so there was a substantial cost there, in terms of having to go back and straighten that out. Now, what else in terms of costs? Hard to see much more... {long pause}. In the early days, we thought that digital signatures would probably be important, as a means of raising trust in the way that you just described earlier; and we spent quite a lot of money on digital signature systems; what we found, though, was that the customer didn't understand that, and therefore they were no value in the relationship. They were pretty expensive, and they actually slowed the process up and were therefore getting in the way of the core customer desire to get in and out of it very quickly.

Clearly, we had to ensure that the security remained at acceptable level. So, we replaced it with PIN and password systems, and specifically the kind of systems, which we commonly see today, which I find quite irritating, are 'please enter the third, fifth and first character of your PIN'. I think the bad news is that it tends to force people to write passwords down, because they can't think what the third, fourth and first are, they write it down. I think there's the danger of writing the password down, put it on a post-it and stick it on the side of the screen, you've potentially got a compromise; but I see this as a potential thing, rather than something that actually happens. So, as I say, I think we probably wasted some money there, in terms of putting these digital signature systems in place; hindsight is a wonderful thing - I think if we went back to that point and took decisions again on what we knew then, we would probably still have gone through those same processes. We had to make the mistake to learn from it; no one else had done it before.

61. **GS – By the way, how are you for time? I feel I'm putting pressure on you!**
62. AH – Maybe we could do a wrap up. I think in terms of **benefits** – just very quickly – the big benefit we got was in terms of the ability to interact with the customer in ways we hadn't been able to do before. You know, previously, except in face-to-face experiences, you couldn't interact with the customer; you could ask the customer to do things and you were pretty well getting binary answers from the customer. Because of the way that the Internet works, you can get the customer to work with you make choices, to express preferences and opinions and that is by far the greatest benefit in my view.
63. **GS – One of the things we haven't had the chance to get into in our discussion, is the effects that Internet Banking had on shaping the organisation; the first thing that comes in mind is actually this division {E-Commerce and Internet}. In relation to the functionality, the operation of the branches, change management – which is something that comes out very loudly – the structure of the call centres, the structure of workplace and all that; what have you seen there?**
64. AH – As regards the role of the Internet? Very little is the honest answer. And, just to give some perspective on that, this Unit is roughly 100 people, and the bank employs 100K people. Most of the bank is completely unchanged organisationally. There's a new channel, and there's a group of people here who are attached to manage that channel. I'd say that – if asked – 95% of people employed in this organisation, would not know that this Unit exists. {laugh}. To me, the big change over time has been... in the kind of pre-electronic world, the pre-Internet world we used to publish an internal telephone directory, which was quite a chunky document. What I noticed was that, initially, 90% of it consisted of people who were working in the network – not customer-facing roles – but they were working in high-street roles. Over time, what has happened is that the number of people out there has reduced dramatically, because we're doing more and more processing work in an automated fashion. Twenty years ago, if you walked into a high street outlet, there were four cashier positions; then there were approximately 20 people in total working in their branches – we usually multiplied the cashier positions by 5; there were loads of people in the back-office, processing bits of paper, cheques and standing orders, making payments, answering the telephone and giving people balances, all that kind of stuff; all that's gone! Now, initially it went into local factories; now, some of it is still in those factories, but a lot of it is just gone! I can remember working in the front line myself. I can remember one particular job where the first thing I had to do every day was go and get balances from probably 20 companies; and I would go then and ring those companies and tell them what the balances were. That was a routine. And by the time I had a bit of a chat with them, that was an hour gone. You know. All of that just disappeared.



65. **GS – Yes. It is also resulting from that centralisation of processes and automation.**
66. AH – Well, agreed, automation is very important, but Internet is another expression of customer self-service; and we were of course doing it through automated voice recognition on telephones and other mechanisms; and they still exist; and actually I'd say that if you want a simple transaction, like you want to know your balance. We can deliver a balance to you through your telephone, much more quickly than we can deliver it to you through your PC at the moment. That's just the relative state of the technologies, you know; like its speed of connection, which is critical there. But the advent of the Internet, I would say, has not changed this organisation "organisationally" by more than 0.1%.
67. **GS – I see; so it's less visible than one would expect.**
68. AH – Absolutely; so, it's changed our relationship with the customer, but it's not really changed this organisation.
69. **GS – One final thing before I let you go. I usually use the example of robots, what people believed that the robots would do; that they were going to displace the workforce; and the Luddite type of reactions to machines. What was the case in relation to workforce issues with the occurrence of Internet Banking? Was it something they were seeing as beneficial, something that would make their lives easier, or was it something they saw as displacing them?**
70. AH – Well, the people who are working here – bear in mind that we set up three years ago, at the high level of the dot com boom – people were fighting to get in here. Because they felt it really was the place to be; and many of them felt that, if they could get some experience here, they would be able to leave and find jobs at three times their going rate, and do very well for themselves. So they had quite a difficulty coming here, people who came and join us, and indeed, I suppose for the first years, we were very concerned about the pace with which people were leaving. Now, that changes as the dot com boom went to burst, and there was less opportunity for people to leave their department. Nevertheless, I think that most people here still believe that this is allowing them to gain skills and experience, which will be valuable to them later, than other things they would be doing. So, people are quite closely wedded to the team; we were also very clear, when we set-up three years ago, that we were only going to keep the Unit for 2 years {laugh}. And we argued that over that span of 2 years, we could reasonably expect to make the core changes that we needed to make, and gain the core learning that would allow us then to disperse the team back to the individual businesses. So, we never actually intended to keep the team going as long as we have to. How much longer we will keep it going, I don't know; but we won't keep it going forever. So, just as people in the businesses are very used to delivering through the high street network, or over the telephone, they're actually pretty good now, and have a very thorough understanding of how they can deliver through the Internet. My guess is that the team *will* be here in a year's time; I doubt it if it will still be around in two years time.
71. **GS – Right. I don't want to abuse more of your time! {laugh}**
72. AH – Well, we ought to call a halt there, but I've very much enjoyed that.
73. **GS – One thing I wanted to ask you is, are there any people within the team or the Royal Bank in general that you think I should speak to, more in relation to the investment appraisal of IT projects etc?**

74. AH – Well, I can certainly put you in touch with our people in Investment Appraisal, and conveniently they are in Edinburgh, so that will be easier for you, I'm sure {laugh}.
75. **GS – That would be actually great! Last thing I wanted to ask you: Is there any sort of documentation that you would be able to provide, that is not confidential or sensitive? I'm not looking into numbers, but only into processes.**
76. AH – Yes, I understand. What I'd like to do – because I don't own that process – is to introduce you to our Investment Appraisal people and ask *them* if they mind giving you that core stuff. I can't see why they should object to it, but, as I say, it's their process rather than mine, and since we are going to talk to them anyway, it's the easiest way to tackle it. So, if you're agreeable, what I'll do is I'll pass your name to them, and perhaps ask them to get in touch with you. Will that be OK?
77. **GS – Yes, that will be fine. Preferably by email, as I will be away for quite a while. Thank you very much.**



#### 1.4. Interview, 12/06/2002

1. **GS – Thanks for this meeting. I would like to start by telling you a few things about myself, so that you know where I come from, and then I'd like you to say a few things about yourself, your background; then we can move on to talk about Internet Banking projects and so on. So, as I told you, I'm originally from Greece; I did my first degree there on Electrical & Electronic Engineering, I worked for 3 years as a networks engineer, I took an MSc in Manchester on wireless applications for networks; I did the MBA here in Edinburgh, then joined the Armed Forces, and now I'm doing this PhD. As I told you, I'm investigating Internet Banking. The actual subject is about investment appraisal techniques, methods and approaches; and decision-making related to Internet Banking projects. It is this, if you like, engineering descent that made me think it is really exciting looking into the way technologies are shaping the banking sector. So, that's where I come from. To you now.**
2. **PD – Yes. I've been involved in financial services for the last 10 years. First I worked for an insurance company in Edinburgh, Scottish Provident, and then joined the RBS. I am an accountant, and I have been working in the Retail Finance area of the Royal Bank. My role then, and for the first 18 months or so, was Decision Support Manager, which was really about appraising projects from the financial perspective; making sure a project meets approved hurdle rates and approved returns. I also did liaison with the marketing department who generated the plans, and look at them in terms of the financial context. So, I've got experience in the investment appraisal side; and one of the projects that I had to look at has been the development of this sort of Online Banking, and also some of the products, as well as the actual channel to deliver the products through the Internet; it was also Internet-specific products. Those are two very distinct areas but they can be affected by the same kind of issues. My experience of these has been really to look at the project and carry out a post implementation review; so it is actually on putting the original business cases together; but having carried out that review, I had to go through the project and really work out in terms of income and expenditure whether we hit the current assumptions that we'd intended; and I think that, out of that process, something I was to draw out were the main issues, I think, with this type of project. So, starting with the channel, if you like, the delivery channel, and being able to use the Internet, for example people can currently use the Internet to do their banking now, the rationale behind that is obviously that if people do their own banking, and not carrying out transactions in branches, which frees-up capacity in branches, which enables branches to focus on selling, which is what they do primarily in the retail area; because it gives customers that element of control to do their own finances. It is actually very difficult to make a strong business case if you're looking to make positive NPV out of all of this, because the assumptions are almost imponderable; you can't say 'well, we know that we're going to get 1000 people signing up and using the bank'. In addition you've got the usual heavy upfront marketing to promote the campaign or to advertise the fact the people can use Direct Banking, the production of CDs and things like that as well. That was viewed as really a response to the market, because, at that time, I think a lot of companies were saying that the Internet is the way to go, and everybody is going to do their banking over the Internet in, say, five years. Of course this hasn't really materialised. It was more seen as a sort of defensive measure to say: "well, if we don't have it there, then it's going to have a negative impact on how our overall perception of how customers perceive us", because they'll say "why haven't they got a digital offering? Why is it that they're not doing it?". So, it wasn't a huge expense, but nor has it generated much, in a way, of income. So, the idea was that it sort of retained customers through having the offering against not having the**

offering, which potentially you might lose customers because they're gone elsewhere; there's few customers actually who do want to carry out their banking online. The second aspect has been delivery of the actual products to be dealt over the Internet – online-only products; I am moving to a sort of fairly sceptical-cynical view here, because this is how it all developed over time: online products, especially financial services products tend to be very very narrow-margin products; because there is huge amount of competition from new entrants, who are keen to get market share, brand awareness; so they're pricing very keenly. So, the Internet banks, you know the Cahoots and Eggs and Smiles, this kind of players, they all say they haven't got the banking infrastructure, the bricks and mortar, to have to pay for; so this sort of 'virtual' banks have, if you like, an edge over the more traditional banks in that sense. But the actual finances of getting products, getting people to buy products and then keeping those people there, without the churn; generally it happens with financial services products; they actually turn out to be quite difficult; so for example, a savings product, what you'll find is that people would launch with, for example, tiered rates so that the more you save, the more you get; they'll also give a bonus period of six months, where they might pay an additional 1%. So some of these people are actually paying more than the base rate on these savings products; now, that's not really financially viable! It's a 'loss lead'. What happens is that you get – what was described by one of the guys in the Treasury Dept. as 'rate tarts' – people who basically go around with the [interest] rate. And this is so easy to churn the business; you don't have to go on and sit in a bank to open an account, answering questions or filling in forms and things like that; you do it very quickly, which means that people now are moving their money very very quickly between current offerings; so, as soon as the six months are out and they've earned their interest, they move elsewhere.

3. **GS – So, there's no retention.**

4. PD – Yes there's very low retention. Obviously that causes a bank... obviously they look to minimise the financial risk of interest rate movements; to do that they'll need a hedge or fund, depending on product types. But it's very difficult to hedge if all your money is churning very very quickly. In addition, you're obliged to have all your cash deposits for the Bank of England; it is a cost holding these deposits as well. If you start paying above base [rate], you're losing money; simple as that. So it's making it quite difficult for people to come in and offer more competitive products; to do that...I know that CGNU are launching their own savings product shortly, and again they may be pricing it very keenly as well. But I think the idea is that they will be giving an offering to their existing customer base; a product they don't currently have. And I think there's an important distinction to be made here, because for the likes of CGNU with a huge customer base of life and other general insurance products, to offer a savings account is entirely different from a bank with its existing customer base, offering a savings account and then offering an online savings account with higher rate. And this brings me to the main point of contention, I think, for these things: for existing banks there is a danger of cannibalisation of their own 'book', in terms of offering a new product; and one thing I have found is that this is almost impossible to measure. And that's not just for savings; it's for other products as well. So, for example, when a bank offers an online loan product, which is priced more keenly than the branch-based loan for example, in terms of the actual investment appraisal, what you're saying is that "we will attract 1000 new accounts/month with this product". But you have to ask the question: "How many of these accounts will be attracted anyway?" because they are existing customers or whether you've actually attracted them with the higher rate. So, you're now looking at the sort of lost income through the cannibalisation of the existing product and the products they would have gained anyway.

5. **GS – You just mentioned that the bank, for instance, will say “We estimate that we’re going to get 1000 new accounts/month”. On what basis is this estimation done?**
6. PD – Again, I think, it’s very difficult to actually back it up; but we’ve done some market research – so there *is* some research there – but ultimately, it’s a bit of an unknown. Again, one of the other problems is that the way that these projects are structured, I think, they give the project to a particular individual who may be working in the sort of product-specific area, and they say: “Right. Your job is to develop an online loan”, or an online savings account. Now such an ad person’s job to deliver this product, and they’re aware of the financial implications; they know that they have to complete a business case; we use a template to calculate NPVs and IRRs based on an Excel spreadsheet. Now, the financial lives they have means that they know about NPV and that they need a positive NPV, but the other factor there, which probably isn’t taken into account, is that there’s only limited technology resource available for whatever reason. So, you’re then in a situation where you’re then competing for that scarce resource. Now, the natural reaction is to underestimate how much technology resource you need, or overestimate the benefits of the project; so, halve the actual volume of sales that you think you’re going to attract; my experience is that that’s what has happened; and it’s continuously happening with all these types of projects.
7. **GS – So, actually, in terms of implementation of IT and the relevant budget: when you said that the Direct Banking project (because this is what we’re talking about),...**
8. PD – Well, that and the online sales.
9. **GS – Right. You said it wasn’t very very expensive to achieve. In terms of the decision and how it was taken, did this project compete at all with projects outside the IT budget?**
10. PD – I think, there are some politics to it as well; the political structure of the organisation. As I said, there will be individuals whose responsibility is to deliver these projects, and, as such, they are competing with other individuals within their own department, who may have other projects to look after; so, as I said, the tendency will be to inflate their idea of what the benefits will be, and perhaps not to fully consider what negative impacts there will be. The other fact, specific to the Royal Bank, is the fact that they took-over Natwest Bank and there’s a huge integration exercise going on, which is draining the organisation of IT resource. So, there is a limited budget there for people to compete, or to compete to get a share of. So, I think, that’s where we are gradually winding up for the last couple of years, and the deadline is coming shortly where we’re going to actually swap the systems over; so, gradually the IT resource is going to wrap-up again as more and more people are freed-up from that integration exercise. So, I think as I said, there’s the political aspect of individuals competing with other individuals for that scarce resource; and the way to do that is that they tend, as I say, to promote a bigger and bigger NPV for their project. From my perspective, people have come to me with business cases saying, “If we invest 3m now, we will be delivering 250m in three years time”. You know, I say to them “this doesn’t happen; you don’t get that”. This is on things like just changing the channel; offering a new channel etc. And their assumptions are just wildly inaccurate; because I don’t think they fully appreciate the process.
11. **GS – The assumptions that you’ve just referred to, is it the one of just offering the online channel *instead of* rather than as a complementary one?**



12. PD – No, it's offering it as a complementary channel but what you tend to get is an individual coming and saying "if we don't offer this service or product or channel, then we lose all that business to everybody else", and it just doesn't happen. And of course, from background, you know that you just don't spend 3m to get 250m; it just doesn't happen; if that were the case, then people would spend 6m to get 500m. So, that's really the case, and my role is to rein back these assumptions and say "well, OK we need to be slightly more objective about it and say to what degree things are going to happen?". So, getting back to the issue of cannibalisation, for example, the marketing team will say "we think that 10% of our additional sales will be cannibalised" and I'm more suspicious when I get a nice round number like 10%, and so I go "how did you get the 10%", and they say "well, we used the first 10 people to come through, where 9 will be completely new to the bank and one person will be swapping their existing product". – "And how do we measure that?" – "OK, we can maybe look at people who closed-down their accounts beforehand, and then open up a new product" – "But what about the people who don't close-down their account?" This kind of questions. So, the way I have approached this in the past is to work out the breakeven point in terms of cannibalisation; so, for every 100 new loans we get, for example, at what point does it make it worthwhile for us to actually offer this product? And so, you know, it might be that 50% cannibalisation – which is maybe a realistic number – is the breakeven point. So, if we can reduce that cannibalisation anywhere near 50%, or get them to show or demonstrate how it can be less than 50, then I give you my backing. So, the process really is that the marketing team will come-up with their plan, they'll forecast volumes and they'll churn how long the amounts will be in force; I'll be able to provide things like the margin and the costs involved and ultimately would be able to generate an NPV; and there's a process of measurement; as I said, one of the main issues is to be able to measure that cannibalisation. So, there's market research and more research after and, as the project goes forward, there will be sort of more research to say "right, these 100 people who are now taking up that online product, where do they come from?" They're actually trying to get them have a questionnaire answered and try to see what these answers can tell them. And that's an important part of this exercise as well.
13. **GS – You just mentioned customers closing accounts and so on; in terms of measurement of - what has been referred to as a very important issue in banking – inactivity of accounts, do you measure this, and how?**
14. PD – Yes it *is* measured; in fact, I've just had this discussion with someone - and a lot of this stuff is confidential – there's a process in place going, to reward people in branches for selling, and this is based on points; and they give someone points for selling a loan, and if it's a big loan or even a longer term one, they get more points; and same for the other products as well. And it's just been suggested that people in the branches should be rewarded for getting people to register for Online Banking. Now, the argument that I gave was that registration is one thing; to actually get people to use it is an entirely different thing. When I looked at the data supporting the provision of that Digital Banking service, the registrations were [very high], whereas the usage was way way down; a very small percentage was using it.
15. **GS – So, the case is that actually people are signing-up and never use it.**
16. PD – Yes.
17. **GS – Is it just the case of being convinced by the sales person to sign up? Just a tick in a box?**
18. PD – I think there are a couple of issues; firstly, there is the issue about people being convinced about it. If you are able to tell them "imagine if you're able to take

control of your accounts and you just go on and transfer money from one to another in real time", that's a fairly compelling argument. But the reality of it, and I've spoken to other people about this, is that firstly you have to logon. And if you haven't got a particularly quick Internet connection, then that can take some considerable time. There's also the security aspects as well; and again there have been some scares over Internet Banking from other organisations. And so the security is fairly strict, which again adds time to the actual logging-in process. Now, one of the other services that the bank offers, Telephone Banking service, where you're dialling and you've immediately got someone there and say "this is my account number, I'm transferring that much to that account number", and it's done. You're there in about 2 minutes; alternatively, if you do it yourself, it can take you 10 minutes to login, and transferring the amounts [will take some more time], whereas there's this "time is money" and people see this trade-off between having control and taking time. And I think the reality of it is that people would prefer to use what we call the Direct Banking service rather than the Digital Banking. From my own perspective, I've registered and my wife is registered; but all our banking is done by Direct Banking rather than through the Internet. So, I think, there is a very small percentage – I would say it's about 1% - who have registered and actually use the Digital Banking service.

19. **GS – Right. I heard you mentioning that the project appraisal process and the financial appraisal process are based on NPVs and calculating hurdle rates and so on. Is there a case for using more sophisticated methods, or IT-specific methods or something like that? Because the argument there is – there is this huge argument you find in the literature as well as from people in the field – that calculating an NPV is just a matter of sometimes arbitrarily setting a higher hurdle rate for a project that is considered more uncertain (not more risky, but more uncertain). So, this is a kind of an arbitrary assumption. Is there something in process for using a more specific financial method?**
20. PD – Such as?
21. **GS – Well, there's more and more use of Real Options, which is again a different game. I don't know if you're aware of how it works...**
22. PD – No.
23. **GS – So, what you're saying is that something more specific is not used because something more specific does not exist?**
24. PD – I think, firstly, the hurdle rate is fixed. And it's generated with the CAPM by the group of Finance people. And therefore we have our hurdle rate there; and that's the same for every product and every project that comes on. They have to meet the group hurdle rate; if it's not mandatory or 'must do' kind of project. Now, it may be, for example, that the provision of the Digital Banking service was never meant to really generate money. So, if – despite what you threw in it, it comes back with a negative NPV, it might still go ahead. So, about what you were saying about perhaps using a different measure, because the NPV is a very arbitrary process, but ultimately, if it's deemed that this is important enough that we want to have it within our armoury or in our product range or whatever, we'll go ahead regardless – well, not regardless - but these things tend to be fairly sensitive to the assumptions that you put-in; and a marginal swing one way or the other; so, it isn't the only factor...
25. **GS – Right. It's interesting that you said that there is a Finance team that actually sets all the hurdle rates for all the projects. Is this a case-by-case process or is it an overall [process]?**



26. PD – There's an overall process that is carried out maybe once a year to determine the hurdle rate; so, it's not looking at the risks associated with an individual project. And the reason for that really is that an organisation of that size it doesn't really make much difference one way or the other in terms of risk; but what we *can* do is to say "well, we can tweak the assumptions within the business world to saying "OK, is this really what's going to happen, change the sensitivities about the number of accounts you're going to get, and how much cannibalisation there is; so that's the way I am approaching this and say "OK, if we get 1000 [signing-up] then that's the NPV; if we get 500, then it's that; if we only get 100 ..." and we just look at it on that basis.
27. **GS – One thing about the Real Options; it is actually a method that is based on the Option Pricing Model (OPM), which is used more and more for strategic appraisal; actually the mechanism is for assigning values to different strategic options, just as you do in financial options.**
28. PD – Right. So is this 'mark to market'? Is it sort of measuring the cash flows against what they're actually generating now and later?
29. **GS – Well, it's actually about taking an option to do a project or defer a project as if it was a financial option. So, there are values assigned to each option.**
30. PD – Is it NPVs they're using, or are you saying "if we carry out this project, we know that we will get 5000 in 6 months time and another 250K in 12 months time" or are they actually trying to see what return they get on that?
31. **GS – It is based on Black-Scholes models for option pricing; I haven't gone into much detail in it, as I'm not a Finance person, but this I something that was developed 6 or 7 years ago, and it is at the centre of the argument for IT projects. One of the things I'm trying to investigate in this PhD is ... I have come across several methods for both financial and strategic appraisal, specifically for IT projects; so, it is about treating IT as a kind of separate 'animal', rather than like other capital investments. What I am trying to see is whether there's any relevance between real life and what you see in books.**
32. PD – Well, I think, of all the IT –purely IT- projects that I've seen, I struggle to recall one that has actually been delivered within budget. So, what tends to happen is that when the budget starts running out, you start reducing the scope of the project; and everybody cuts their cloth to fit to what they have to spend, basically. And that's been my experience throughout very many projects; they're always inclined to overrun, because they're always underestimating; there isn't enough contingency and problems will arise that happen to be the same; and in every case, that's the same. And now, what I'm asked to look at in an IT project, I'm given an estimate; you know, I think it's fairly safe to multiply [the estimate] by 4 to get the actual cost in IT. And that is usually proved to be right.
33. **GS – Is this estimation based on your statistics?**
34. PD – Well, one of the problems to actually quantifying cost in IT projects, it's OK for me to go out and buy a browser or buy some hardware; but the actual man-hours of development, I think because everything changes so often, - and a good example is some of the web-based technology that's recently been developed, for us, it was new; we hadn't done it before; and it seems to me that every time we approach another technology project, there isn't really a learning curve there, because the whole thing has shifted. So, you're not doing the same thing again so

that you can say "Right; we made mistakes on this one, we know what we're going to do this time, and we'll do it better" there will be elements of that; but everything shifts along a bit further; it is slightly different technology and that means it is very very difficult to predict. And I think human nature is that people who bring these quotes if you like, tend to underestimate the amount of effort that goes into it.

35. **GS – You mentioned problems in IT projects. In relation to an Internet Banking project which are the most important problems that just come to mind when you think about it? I mean during the implementation.**
36. PD – During the implementation, I think, issues around security and penetration testing. These are the two that spring to mind. Because, at the time that we were about to implement, - I'm pretty sure this was slightly before my time – and then there were some problems with security that meant that the whole thing had to be revisited; I think it was a security breach in another financial institution, which meant we were sort of re-looking what we would do. And the sort of changes to do to upgrade the security, and then carry on with penetration testing on it. So, it's a kind of rework. I know that this was a major issues.
37. **GS – On starting the project – I'm just moving on slightly just to come back on investment appraisal issues – there should be some setting-up some workgroups, assign different responsibilities, structure the project, define stages and so on. Can you talk a bit on that?**
38. PD – Not really, because I haven't been involved in the actual business definition, or the specification. So, yes, all these things happened, things such as minutes and things; and I'm aware that they were there, but I wasn't involved personally. So what tends to happen is that I'll be brought-in on a sort of consultancy basis to say, "What should we be doing? What things should we be looking at? What things do we need to measure? This is what we're going to do". Pick out several sensitivities; what were the major issues, what is the impact on income and expenditure.
39. **GS – What were the main unexpected costs? And – whether there were any – unexpected benefits?**
40. PD – We don't often find unexpected benefits; Unexpected costs: I think it's again rework. There are two issues: Firstly, there is the cost of keeping key individuals involved in the project, so you tend to find sort of goals and perhaps people tied financially to seeing through the project, because any change in personnel in a project, has a detrimental impact on the cost; if you had someone to be a project manager, and that project manager leaves, and you get someone else and then carry on again, there's always rework; so, I think that unexpected costs are always brought about people issues and development costs, so it's more complicated for what's being spent isn't quite the same as... the business thought to go through this iterative change request process whereby they will say "no, did we say that?.. I'm not sure this is what we actually wanted. *This* is what we want". So you get this kind of slippage of the scope; I think that tends to be the main issue in cost. I haven't got any examples of benefits.
41. **GS – I was actually thinking of something that could be of some relevance; for example, when we're talking about people doing transactions over the Internet, mainly with large sums of money – I know it's something that rarely happens ...**
42. PD – There are limits on how much you can actually transfer. I think it's a 100K or something like that.

43. **GS – Right. In that respect, when a customer is doing an online transaction, he or she actually assumes the responsibility of doing that; which means that the responsibility is removed from the bank employee who would be doing this transaction if you go and say “listen, I want 20K to be transferred to Mr X”, or something like that. So, this person behind the desk has the responsibility in this instance. When this is done online, then the customer himself assumes the responsibility. Is this something that you would see as a measurable benefit, in terms of it [the transfer] being the customer’s liability?**
44. PD – I suppose there is a risk issue associated with it; but again, the kind of transactions we are talking about aren’t very common in the branches anyway, so I don’t see any sort of benefit attributed to that. But I suppose if the customer is very good at exchanging in the branch or the Internet; if they make it on the Internet it’s wholly their responsibility, whereas they could argue that there was some misunderstanding in the branch; so, from that perspective, maybe. But no, I don’t see any benefits there.
45. **GS – Right. In general, looking into the post-implementation appraisal, looking into benefits, and specifically intangible benefits, which ones – if any – have you seen, and how do you measure them?**
46. PD – I suppose I take a very hard-line view on the tangible-intangible split. If there are intangible benefits there, I won’t measure them in terms of justifying the business case on that basis, but I will mention them; so if there are intangible benefits, they will get mentioned in a supporting commentary, but they won’t be part of the financial appraisal. So, for example, it may be that through offering a Digital Banking service, there will be some other product gains; so for example, somebody says “OK. I like the idea of Digital Banking, and, by the way, once I’m here, I’ll be bringing my current account with me or my mortgage with me so I can do transactions on them as well”. And obviously, with those products comes the additional margin of those incremental products; but again, because it’s so difficult to measure and recognise that it might happen, we don’t actually include that in the financial appraisal. Just other things in terms of a successful online product is bound to lead to more customer awareness or customer satisfaction, and these types of things; but again, there’s no use to translate these to hard cash. That’s for this kind of intangibles. I think it is really this sort of cross-selling of other products and services, insurance or something like that. So, people go to the website and maybe advertising for other products, so at the same time maybe there is this cross-sale.
47. **GS – Is there a monitoring process for that?**
48. PD – I’m not sure. But again, the view that my partner will take is that this kind of projects should stand up on their own, without having to be supported by less tangible benefits; particularly to make a positive return.
49. **GS – I see. Now, let me move on to something more related to organisational issues. And this has to do with how people were feeling in the department that you were in when electronic banking, Digital Banking was being introduced; about, you know, the future of the organisation, their jobs or their duties. How has that developed over time till now?**
50. PD – I think, again, the political issues were quite important because I’ve seen projects that haven’t got a hit, and the reaction of people whose job it is to perform the project that is declined; these people think “what am I going to do now? I’ve been brought in to do this, and it’s been declined, and I don’t have a job”. Well, ultimately they can be turned to other things; but they become associated with a

failed project if you like, and this has a negative psychological effect. The first part of your question, in terms of what was the atmosphere and what was the culture like in terms of delivering something in Digital Banking, at the time, I think, the Internet was seen as such a huge benefit that you had to be doing it, almost. But since then, we obviously had the collapse of the dot com companies and, I think, the general sort of loss of faith in the Internet as the future, if you like, in terms of the future channel of delivery for us. So, it's kind of there in the background, but it's not being actively promoted now.

51. **GS – What I am actually interested in, is how people see Internet Banking to effect their jobs. I guess it is about, not something similar to the robots case, but it's more or less in the same area. Would people feel that they would be somehow displaced or ...**
52. PD – No, I don't think so. The idea of having the Internet Banking service is to free-up capacity in the branches. And as far as the branches are concerned, everything that does that is welcome. So, people in the branches are certainly not feeling left out. You've then got the impact on the people who run the Digital Banking side; so, it's wholly their responsibility. So, these people are feeling fulfilled, because it's something they've been working on and a part of it is their responsibility. The other thing, I suppose from a marketing perspective, people are able to say "yes, we've got the Digital Banking, our online products or whatever; this is part of our product portfolio"; again there's some pride attached to that. But I don't see any negative thinking. I think it is that you primarily have an additional service; an additional product, as part of the overall portfolio. It's not like "These are our products; and by the way we've got this online aspect". It's just "This is our portfolio, and again this is traditional and digital/online as well".
53. **GS – Have you seen new sets of expertise cropping up from launching Internet Banking?**
54. PD – Yes, in terms of ... historically there were no people working in web-based solutions; more and more it's seen – and still it's seen – as [important]; I've seen projects on the go since 1999 to deliver web-based solutions; technology solutions. And they're still viewed as the way we want to be doing things. So, for example, people in branches can logon and there's a mortgage application process that has been partly automated through web-based technology, and that's still seen as the way we want it. So I think there are being some benefits there in terms of 'if we approach this again, we do have some skills there'. Because one of the key factors as well has been the skill shortage in the bank. Some of the work has been contracted out to third parties; it's been new work for them as well. If you go out and try and outsource the supply of some of this work, it's narrowed down very quickly to one or two companies. And there's big scale issues as well, being such a large organisation; if you approach a small company to try to help you, they're delighted because they got a large order; but even within their own ranks they probably don't have sufficient resource and capacity to actually support you to the kind of level you would expect.
55. **GS – Right. As you said there was the expertise of the web-based development. Do you have any other observations there?**
56. PD – Just trying to think...I think, probably, as I said, there was a launch – and I wasn't there – a huge kind of advertising campaign; I get the impression that this is something you can revisit now and say "well, once the market is calmed down a bit, once the other sort of e-banks have come and gone a bit, because I notice a lot of them are changing their rates, because they realise it's impossible without moving to their more sustainable rates; and that's the time for the traditional banks to come back in and say "well, actually we can offer something. That's competitive



now"; because a lot of financial services products...there are comparative websites like MoneyFacts and places like that, and people go there and say "if you're not in the top-five, there's no point in being there or advertising your rate". So what we find is that we're not in the top-five; we've got a product there, and if people want it, they can find it through the website; we're not going to go out and actively promote it. If you go out and say "Oh, look at this; you can get a loan at 9% APR", whereas other people are doing 8%, there's nothing to shout about. But once those rates in the market begin to creep up again, as people get concerned for their margins, you get the impression that other players will come back in and get more actively promoting.

57. **GS – In cases where I was talking to people from other banks – your bank as well – there was an issue that cropped up; the question was “which expertise would you say is currently more important for Internet Banking operations? Financial expertise – banking expertise, or IT expertise?”**
58. PD – I think it would probably be IT expertise and the reason for that is that I don't think the banking or finance expertise is changing particularly. It's not new; you know; a loan is still a loan. And there are still capital requirements placed on the bank; but providing these kind of things, that still has to be calculated; and they're calculated on the same basis still. So, although you can play about with margins, and things like that, it's still after all a financial services product. The thing that will change it, I think, is technology; so, making it easier or more straightforward to carry on and do things...
59. **GS – The interesting thing in what I was referring to before was that usually people told me “well, it's actually sales and marketing rather than either IT or financial expertise [that's more important]”. What would you say?**
60. PD – Again I don't know; I guess what I was looking for was a step-change of technology from the existing technology; I think, if there is no step-change in technology, then you need sales and marketing to promote it. Certainly, it's not so much that it's technology as opposed to the other two; but it's not the finance part; it's something else. If there isn't a step change, then the only way to deliver it is really to promote it.
61. **GS – The other interesting bit I would like to come back to was related to Internet-only products; and I'd like to discuss how this new channel – the Internet – is shaping products in terms of financial engineering. I usually see this in terms of a feedback loop; i.e. when you promote this channel, then the channel brings you such and such benefits, and then you go back and re-engineer – in a way – the product.**
62. PD – Yes. I suppose the main issue that I see in this is the margin. There is just very very low margin on these products because it's so competitive; you can't sell it on service, because everybody is offering the same service as you; so, for example, there are all the links there in terms of risk and links into sort of lending systems; credit scoring is such a link as well. So, assuming that the people taking out the loans are of better quality in terms of risk default, what you can do really is to play about with the margins and the price of the products.
63. **GS – So, there is not much in terms of redesigning the product...**
64. PD – I don't think so; I mean, I suppose the redesign is coming not from the straightforward financial services product; it's more looking into products that have been about elsewhere, the likes of Australia and New Zealand, the likes of offset mortgages and so forth; where it isn't just – you know Open Plan by Woolwich and a couple of others as well – it's not like saying “there is a loan; this loan is



different"; it's more saying "actually there's a whole suite of financial services products which are all intertwined". So, if you've got your savings balance and you want a loan, and you got your mortgage and you got a current account and all these things, you get to pay the minimum amount of interest. It's a complete package. I think that's the way it will go; these products will become more common, that's for sure; Intelligent Finance as well offer this sort of things. So, it's a kind of offsetting credit-debit balances I think; it is that way the thing is changing mostly.

65. **GS – What's your idea about account aggregators?**

66. PD – In terms of bringing lots of accounts together? Standard Life bank have done that with Friends and Family.

67. **GS – Egg has just launched that, and earlier Citibank...**

68. PD – To be honest, I don't see it taking up, how successful it's actually been for, say, the bank, and perhaps it's something I've haven't spent long time thinking about.

69. **GS – Well, it's quite successful in the States. It's about 60% [of customers using it]. It's not taking up in the UK, and that's an interesting point. Is it a regulatory issue?**

70. PD – There are a lot more independent banks in the States, whereas, for example, here, you've got fewer major players; so you've got ourselves and Barclays, HSBC and Lloyds TSB; they're the only major players. Whereas in the States it's almost state-specific. And although we're kind of expanding in the States as well with Citizens Bank and that is taking the brand and the methodology, in terms of spreading further afield; I'm not really that aware of what's happening in the States, but I *do* know there are a lot of independent banks which presumably can offer completely different services.

71. **GS – So, it's a matter of the market setting rather than something else.**

72. PD – I think so; as I said, I'm not sure; it's more speculation really.

73. **GS – Right. You said you were not involved in the overall implementation process and that you had a more consulting role. The whole system was about building the interface and probably add bits and pieces in the back-office systems. From your observations there, how did the design of the customer interface affect the back-office systems? Or was it something the bank designed to sit on top of the back-office system?**

74. PD – I don't know the technical details to be honest; but I've got the impression that it was just a front-end really. What the people would see was somehow sitting on top of the back office; I don't know what the interface was actually comprising.

75. **GS – In terms of more general issues, there is this proposition by one or two banks - MLHSBC have done it and closed it, Lloyds as well – the High Net Worth proposition. What this actually proposes in a way is a segmentation of customer base according to Net Worth. How do you see that? Do you see it working?**

76. PD – I think it's a tricky one; because, obviously you have the HNW and you have the mass-market; and in fact there's another segment now, in terms of banks are being forced to have people to open account for sort of benefit payments and things like that – the bottom-end of the scale if you like. So, they have the very basic products, then you got mass-market and then you got HNW. I think, what

you'll find is that the HNW category just expands to accept a much more widely based group of individuals, so the criteria are maybe relaxed. I've heard the HNW argument being before for the last 10 years; from the other financial services side, you've got the Financial Advice who are always keen to attract these HNW individuals, but HNW historically has been sort of – I don't know if you've got definitions – 50K liquid assets, 250K house or something like that. And I think more and more people are falling into this category; their needs are probably changing as well; so, I think it's gone beyond...we still got the top end; we've got the Coots Private Banking, so you've got private banking which again is not the same as the HNW. So, on the one hand you've got the David Beckham's banking or whoever they bank with, and then you got the HNW proposition. You know; you've got this expanding group of individuals who somehow feel worthy of different service, being that their own relationship manager or something like this, but I'm not sure that will be worthwhile. I can see it expanding because people want to differentiate and target these people with a particular fashion; with different products and different services, but I think HNW as in a small group of people that are getting this professional relationship manager or whatever, I don't think that's part of the way forward.

77. **GS – Right, we'll probably have to stop here; do you think that there is any area in particular that I should be looking at in this research?**
78. PD – The one area that I would have the greatest concern about is actually driving through the benefits of projects; actually delivering the benefits and actually being able to measure them. And that involves the sort of monitoring, the review afterwards as well; I've always found I the most difficult thing to get people to commit to. So, OK, we've got an Internet proposition, another product; we've got the issues about cannibalisation, the issues of what this [the project] is actually generating for us, traditionally at low margins; how are we making money out of it. I mean, somebody comes out with a project and says, "we're going to do this"; - again, I've recently had this – and I said "show me how you make the money out of it". And it can't just be a supposition; it can't just be assumptions; it has to be something tangible and it has to be something measurable; and that's where people have the greatest difficulty. I think, if you find people to answer these questions, you can do it.
79. **GS – Final question: are there any of your colleagues that you would recommend I should to talk to?**
80. PD – I don't think so; now, a lot of the views are my own, as opposed to that of the organisation. I don't really feel it would be of benefit speaking to other people, on the operational side for example. But if I think of anybody, I got your details and I'll get in touch.
81. **GS – Finally, is there any kind of documentation that's not confidential that you would be able to provide?**
82. PD – Yes. I can give the methodology of how we actually looked at the online and the cannibalisation and so forth. There is a sort of template for that. Financial appraisal as well. I've got your email address.
83. **GS – Right. That would be great. If I come up with anything else I'd like to ask, would you mind if I emailed you?**
84. PD – No, that would be fine.
85. **GS – Right. Thanks very much for that.**

86. PD – Has this been useful?
87. **GS – Yes, really useful; you don't often get people talking about the actual methods. so in these terms it was very very useful.**
88. PD – I hope what I've said was not very contradictory to what other people have said.

### 1.5. Interview, 3/10/2002

1. **GS** – More or less I have told you where I come from. I would like to start by saying a few things about my PhD, and then ask you to tell me a few things about yourself and what you're doing now, and your role in the Royal Bank. Actually the main subject of my PhD is Technology Management. I am dealing with the banking sector and specifically with Internet banking. The reason I'm doing it is that, first of all, I am fascinated by the way technology has changed financial services, especially in the UK, which is well advanced in both financial services and IT. The other reason is that there are considerable gaps between the issues of valuation of technology and the actual practice of decision-making, implementation and so on. So there is a sort of grey area there, which I'm trying to investigate. So, more or less that's what I do. Would you like to say a few things about yourself?
2. **VC** – The last thing you said is very interesting because companies quite often put together business cases to justify the expense of going down a particular avenue, and they'd use whatever means necessary or whatever, to create that business case. What they're very often not good at, is actually measuring whether they achieve that. So, they'll work it out beforehand and it looks pretty good, so they go for it; but they're not very good about whether they actually achieved that business case in the end. There is often no metric put in place to measure it. In terms of where I come from, I used to work in the Royal Bank, and I worked there in security; and I had two different roles, largely, when I worked initially as a security consultant and the idea was then that I would work with development; building security into systems to make sure that they were suitable for the financial services industry and the bank. I did work on the Royal Bank's Direct Banking at one point, but in many other systems. Internet banking isn't just about the retail customers; it's very often with the business customers. Way before the Internet was there, banks were doing e-commerce with a lot of their business customers who would operate their accounts over a private network. But also for many internal applications and a lot of systems that would be dealing with other banks or with organisations such as BACS and APACS. So, it's systems where the security standards were kind of federated as to what you should achieve and work with the business and the technology areas to make sure we've got the right level of security in place; a lot of it was evaluating risk, coming up with a security design, and it may also be identifying components or solutions to meet some of those security requirements. You know, so, sometimes you might have to buy a separate product to come in and do the security; it may be a procedure that we put in place to deal with a particular risk, or it might be something that the bank chooses to deal with in another way, like just to insure against it if it happened; to get some kind of financial guarantee over it. So there's different ways into which you'd build security into a system. So, that's what I worked on. The other role I had was managing security; luckily I took over the management of operational security; so, if you like, the consultancy side is more in development and helping people build security systems. And then, when they go alive, someone has to be responsible for managing it. Day-to-day operations, creating new users and the like. So, I used to manage a team of people that were responsible for managing security on a number of the bank's infrastructure and application systems. So, infrastructure is things like mainframe, UNIX, but also some internal applications of security and PKI and that kind of thing. I've left there, and now I work with IBM in a partner organisation called Tivoli, which is part of the software side. Basically I work in the services side, helping customers implement the Tivoli security products. There's more than 3 products, but there's likely 3 products that we actually sell, going out of the dawn, and we're doing customer work on. And the main one of these is a product called 'Access Manager', which is a web security product. A lot of companies, especially financial services companies are buying this to kind of



manage Internet users coming into their systems. So, in the early days, they might have had their own proprietary systems for authentication and access control to their Intranet or Internet systems; and now they're buying package solutions, so that's one of them. That's largely what I do.

3. **GS – Regarding this access control system, Access Manager, is it something that actually simply sits upon the bank's system for Internet security, or is it something that is tailored to each system?**
4. VC – Yes, it's a standard package but it is very tailored... This package has been on the market for a few years now; it's probably one of the most mature in the market. It obviously does things out of the box and has basic configurations, but when we go on-site there can be a lot of tailoring to do, depending on what the customers' requirements are. Some customers go in with a very blinkered idea of how they want the security to work, and, regardless of what product they use, they want it to work exactly the way they first thought it would do. So, that's where you get a lot of tailoring involved. Other customers would take a more pragmatic approach and say "well, that's not exactly how I thought it would work", or maybe they didn't have any preconceived ideas on how it should work. All they're just looking for is the kind of thing they're given out of the box, are they reasonable for this environment? And if they are, then they'll go with the standard out-of-the-box approach because it's cheaper. So, it's sometimes very hard when people have a predefined thought as to how it should work to bring them back; and so there's where we get involved in doing quite customised solutions which, you could argue, is not money well spent in some cases.
5. **GS – So, it is an issue of perception of the customer and how they perceive security to look like, rather than how they perceive security to work.**
6. VC – Well, to look and to work sometimes. I'm going both sides of the fence – excuse me – I'm getting quite good insights; I might have been one of those bad customers at one point. Really, when you're going into a project like this, you should be looking at what you're trying to achieve. So, you're looking at "this is what I want to do, and not necessarily how that will work" So your side of the requirements is being quite functional, whereas a lot of people, when they're going into the selection, they over-analyse it. They can say "I want it to work this way and do A, B, C, D and E"; and the final product works for A, C, D, and E. But it gets to the same goal; it does the same thing at the end of the day; it just does it in a different way.
7. **GS – So, there's actually something hidden that they don't specifically see, but effectively it is done?**
8. VC – Well, it does it in a different way but it's got some degree of equivalence so it's just different ways for achieving the goal. For instance, the product comes with different authentication mechanisms out of the box. So, you can use things like user ID and password, you can use SSL certificates... And an SSL certificate, you know, is negotiated either end of the exchange and you can do it without certificates in the browser, or you can do it with certificates, which is like a public key system. And it has a lot of other authentication mechanisms. Now, some of these are weak and some of these are strong mechanisms. And the customer may find that he wants a variant on, say, SSL; he doesn't want to use SSL; he wants to use another type of digital signature. So, it could go to a lot of expense generating that digital signature and customising the product, whereas SSL certificates would be the equivalent out-of-the-box to achieve the same level of security. And it would be cheaper for them, because they don't have to customise. Now, sometimes, they may have very good reasons of why they have to customise. It might be a mandate from, for instance, APACS or some other governing body. Sometimes they're just



doing it because that's what they first thought of it. And, you know, maybe somewhere it is written in a policies document that it has to work in a specific way, that's been generated by - not academics but - people that aren't really hands-on. And I've come from that background where I'm not really a hands-on techie. And it's easy to write a policy that says, "It should do this". Now, when you buy a product, it might not do it that way. But, in effect, what you should be looking at is 'is there any risk in not doing it this way and doing it this other way'? If it's no other risk involved but it's just the letter of the law, then you should be able to bend it, or go back and re-write that law. But sometimes, what you find is that technical people who are buying the product find that they can't communicate with the law-makers, if you like, that set the policy, and go back and change it saying "it doesn't work and that's going to cost us an extra 100K". So, in effect, some companies like the big banks will just spend the extra 100K; it's a drop to the ocean for them maybe.

9. **GS – Speaking of security – and as my main subject relates to the identification of costs and benefits – there's an important question about security: Is there a price on security? For example, if you are to slightly improve your security by 3% (if you can put numbers on that), and the cost for this is double than what you would spend if you didn't, then how is the 'yes' or 'no' decision taken? Because people I have been speaking to from banks say that security is non-negotiable; it's something that they don't compromise in general. What is your experience?**
10. **VC – A bank will always say it doesn't compromise because it can't say anything else really. If you were to spend as much money as you could in security, it would be a bottomless pit, because you'd just keep going and going and going. So, there's always some degree of compromise. And largely, the way that you work out how much security is in systems, is that you do risk analysis. So you look at the threats and the vulnerabilities that particular systems may have and, obviously, if it's something that's an internal system, it has less threats and vulnerabilities than something that's maybe facing on the Internet. So, you kind of itemise each one of those almost. Also, one of the things that you need to do is value the data that you're trying to protect. So, if it's customer confidential data like account information, things like undisclosed accounts to a bank or financial institution, then you need to protect that information and only disclose it at the year end when it's publicised. So, that kind of information is highly sensitive and has very high value, so, obviously, that would dictate higher security requirements. If it's lower data, for instance, maybe a customer name and address would be medium {sensitivity}. Because it's a name and address of a customer. But if you associate that name and address with the bank account and maybe spending trends, like where this money is going, then it becomes highly sensitive. Information that's maybe of lower value might be the transactions themselves in terms of confidentiality. So, the fact that we're transferring money from A to B may not, in some cases, be sensitive. It might be that you're going to an ATM and you're withdrawing money. But if you're transferring your PIN over there, then that's highly sensitive. And also if you're looking at consolidated records, that's more sensitive than, say, the odd transaction that's moving across the network. You can go through this risk analysis and how secure you need it to be, the largest thing being identifying the value in the assets. Now, in a bank a lot of the assets do get valued as being highly sensitive. The other thing is the way you're trying to protect them and eliminate these threats and vulnerabilities, depending on that value, to what detail and what level of control you would go to, will be dictated by the value of the assets. And there's different ways, obviously, that you can mitigate risk. And each one of those will have a cost associated with it. So, you will choose the most cost-effective solution to bring that risk down to an acceptable level. But anyone who works in security will always tell you that, someone who has got unlimited assets to try and break into a system potentially can do so. Because it is very difficult to create a**

100% secure system. At the end of the day, if you make it so difficult that it's going to take many years to do, and the cost of launching the attack is going to be less than the benefit they're going to obtain, then the risk of it ever happening is benign. And the other thing is, one of the greatest protections is not just having a secure system, but being able to detect things after the event, which is things like audit trails and also trends. You know, if someone has broken into the bank and were starting to transfer money illegitimately, the bank should be able to identify that this is a new trend that is being in and that should kind of raise alerts. These things that you can do with systems in the background that would do a kind of heuristic analysis on transactions and could spot unusual trends; a lot of the banks now use some fraud systems like that to protect customers' credit cards and of they find that a card is being used in an unusual way, they can, after the fact, go to the customer and say "Is this your transaction?" and identify things happening much earlier. So yes. Security has its costs and you have to work out really whether it's worth spending that extra 3% of your budget to protect {your systems} and {ask yourself} "3% more security, is that going to give you anything of great value?"

11. **GS – You mentioned attaching value to information using that risk analysis. Going into that process of attaching a value to information and deciding how sensitive this is, is that a process that comes under a template? Or is it a heuristic one?**
12. **VC –** There's various methods; risk analysis is a very common tool in computer security. When we are valuing an asset, there's 3 features that you would value it against. One, the data being available: so, for instance, in some systems, if it goes down it's not too important; we can recover it later and it's not great cost. And when you're measuring availability you may measure in different timescales. So you might measure it on "well, what if it's unavailable for 1 hour, 4 hours, a day, a week, maybe a month". A month, typically, you know, you've lost credibility. So everything gets high after a month, unless it's some kind of strange kind of tax system. Some systems are only critical at certain times a year. Such as your accounting system; it becomes more important at year-end when it comes to reporting to the Stock Exchange. Some systems would have an hour. If the system is down after an hour at a certain time of day, it could become critical. And these will be systems such as the settlement system at the end of each financial day that banks have that does the settlement process, such as BACS; and they settle each other's accounts. And, you know, if they're not going to settle on time, they have to ask for an extension. And it becomes very sensitive; they lose face; there are financial penalties, and it draws a lot of attention into their banking systems and the way they operate. So there are systems like that, where the availability can become critical after 1 hour. Two, you would also measure against the integrity of the information. What would happen if this information was maliciously changed? And the things that you're also looking for is whether they'll be a tangible financial loss, when {the bank} is going to lose its money or not make any profit; it's going to lose transactions, there's going to be financial penalties etc. It might also be an indirect loss in that you're going to lose respect in the marketplace. It might be something that is going to affect your share price. Noticeably it would affect the share price to any company; but particularly at banks, it's very very sensitive. There's different ways that you would measure those losses. So, you'd measure integrity of the information, which is whether someone could change it and how that would affect you. And then, three, you measure the confidentiality of the information. So, for instance, something like a website that's holding information like marketing information – publishing rates and stuff like that – that might not be confidential because it's open to the public; but we want that information to be accurate. Because if it's not accurate, it's false advertising. Some information may not be confidential, such as the settlement information, although different people would argue that the settlement information at the end of the day is largely, you know, 10m pounds getting one way and 9m – or more likely 900m – pounds

coming the other way. And the difference might be a very small figure. That's probably not confidential but again the integrity of the information is important. But there's other examples where integrity might not be important but confidentiality is. When you protect something for confidentiality, you almost protect the integrity of it as well. And there's ways to protect integrity of your information that might have a by-product that actually makes that information... nobody can see it now, so we're protecting it; there's different security techniques to kind of deliver what you're trying to do. It's very difficult to explain in a nutshell, but with every system there will be some residual risk left. But you have to decide as to whether it's likely to happen, whether the cost of eliminating that risk is prohibitive. If it's something very unlikely and very technical you have to do, it's more likely that you do something like insure against it; spending a very small amount of outlay to say "well, if this happens, we'll have some kind of financial guarantee". Right, I think I covered it all.

13. **GS – Right. Regarding the projects that you've been working on, especially in the Royal Bank, within the banking environment and projects relating to Internet banking or Internet systems, could you more or less briefly describe the way that one such project was decided upon, competing with other projects, accepted. There are some instances there, for example, setting up a business case first, then setting up the financial case and these being approved etc. What I am looking into there is the decision making process and the decisions at different levels.**
14. VC – I can only talk generically about the process because largely I am more from the technical side of technology, whereas it's the business, if you like, - certainly within RBS – that holds the budgets. So, they decided as a business – and the bank is open to many different businesses – on what they want to do this year and what they want to achieve and they have their own targets. And largely obviously those are set down by the Executive {board}. Now, one of the strange things is – and a lot of the financial institutions did - kind of came up with plans to exploit Internet banking at the same time – and it was a natural evolution, because in some ways they were already giving a similar service, and charging business customers for it through private networks. So, allowing business customers to look online at account balances, initiate transfers, pay creditors, that kind of thing. So, they had some experience of it; but the Internet coming along kind of meant to a lot of these companies that they could deliver a similar service much wider and much cheaper. You know, because they're not having to pay for private networks, the Internet being free in effect. So, a lot of people seized on this; but also, like everybody else, there's a big hype with the Internet, and everybody wanted to be in it; so it was, whilst a lot of organisations – and they would have to put together some kind of a business case – in a lot of instances the hype was so much there, that it was almost a no-brainer; that they *had* to kind of be in that. And the Executive were forcing them. A classic example is that at different times, spending freezes were being put on. In many cases, an organisation wouldn't know why these spending freezes are, until maybe later on, maybe you had got a merger with someone, or the accounts weren't stacking up and they needed to report a good year-end. But whenever they'd put spending freezes on, the only thing they would provide against that was "unless it's e-banking". So, the bank had kind of announced at a very high level in the Executive, that e-banking – which was kind of the common phrase – was what they were going to be. And it was like 'if you want to buy a car, you want to buy a Ferrari; if you want a bank you want it to be inside the Internet game...'. And, it *is* strange but, I mean we saw it in the Stock Exchange, a lot of start-up companies and anything that was technology-based or web-based got funding whether it got a business case or not. Banks were maybe a little bit shrewder than that, in that they didn't have many that went off at a complete tangent to the core business. But some of the business cases, I would imagine, would be quite strange; I think, initially, what they were probably doing would have been looking at how much money they could save, because the cost of



Internet banking transactions *is* lower; and they would have had some way of measuring that beforehand – and they certainly do now – and it is far cheaper for an Internet banking transaction than one that is coming through a branch network. So, they've always been able to manage that; and that would be one of the things that would be in the business case that they put together. Of course, a harder thing to try and quantify is how many new customers you're going to attract because of offering this service, and how many customers you're going to retain. But I think it was perceived as – and obviously at that time, the Royal Bank was much smaller than it is now, because they bought Natwest – so, the bank was always seen as an innovative player; and that's where its course trends were to hit niche parts of the market and be very strong on those areas; so that's probably why they jumped on this thing of Internet banking; this is something where a small bank can take-on the big players, because it's about getting your product to market first. And I think the Royal Bank was actually the first bank to have a full Internet service. Barclays actually came up with the PC Banking service, but instead of going through an ISP, you're actually dialling-in to Barclays, and Barclays were almost an ISP at that point. So, they were extraordinarily pleased – even though Barclays offered the same service, as far as the customer was concerned – you know, RBS claimed it was the first to have this. The financial case and side of it, there is one; but I think it's much smaller in terms of almost the prestige basis of it. I think the banks would just say that they wouldn't exist if they didn't have these systems, such as Direct Banking, just because all the other players do. So if you're becoming a new customer, or if you are a customer and it is important to you, you're going to move your account; and I think they would have obviously had to do some marketing around this, but in those days a lot of it was driven by consultancy firms; nobody had a specific way they could give; you know, like, there's no metric to go by. It was more a visionary kind of thing, in terms of 'this is where we are today, nobody is in Internet banking but Internet is taking off; it will be where it converges down in the future'. But nobody could quantify because nobody was in it. So, it's very much a kind of a visionary approach that 'if we're not in this game, we're going to lose customers, everyone is going to have it' and in some cases they were right, in terms of things like the fact that people are going to have a PC in their home, they're going to have Internet connection etc. It was just ramping-up at that stage.

15. **GS – So it was not the case for financial analysis based on real figures because real figures did not exist. And the financial case was not that strong a card for giving approval to such a project. Is that more or less what you're saying? Financial justification *has* to be in place for obvious reasons.**
16. VC – I can't remember, and I don't think I'd see any business cases at the time. They must have been there. I think if they were, they would either have very little financials or they would have been pure guesswork. Now, today, where they have experience of this and knowledge, they can have metrics that will provide a business case. For instance, it might be that they're adding new functionality to their application and they can work out now whether that's going to bring in additional money, and look at other institutions and see whether they're offering this kind of service. But back then, in the initial days, I think it was very much like we just had to be in this; if we're not in it, then other people will be, and we'll lose out. They kind of knew maybe how much it would cost; they also knew that it would lower the {branch} transactions, and some of the business case that was originally put to this would have been to reduce branch networks. That was definitely in the initial business case and one of the Royal Bank's intentions was to reduce the costly kind of retail branch infrastructure and the reliance on staff and customer-facing transactions.
17. **GS – Did that happen?**



18. VC – No, it didn't happen. It was definitely, kind of, obviously the way people perceived it. There will have been some rationalisation to a certain extent, but I think not directly relevant to the Internet banking, just because these were very small areas. But Royal Bank took on Natwest meant a reverse in strategy, because Natwest is a huge bank; much bigger than the Royal Bank. In the perception of its shareholders, it wasn't achieving real value for money; so that was how the Royal Bank management was able to buy it out. It convinced institutional shareholders that it could run the bank better than it did. And the way it attacked it, largely was in the technology side. They said, you know, 'they're spending too much money and we can run their systems a lot better'; or 'we can run their services a lot better on our systems'. The other public thing that Natwest was doing was that it was not very popular with the general public because it had to try and cut cost and it was announcing that it was going to really rationalise its branch network. And it might have been a good financial decision, in that these branches might have not been cost-effective; but it was enormously unpopular with its customers. And the Royal Bank, one of the things that it attacked Natwest on was that it said 'we're not closing the branches'. {laugh} And that was a kind of a complete turnaround for the bank, but, if you like, it was for a real reason: it was to convince people that it could purchase the bank. It obviously had to rationalise...I don't know; it hasn't because it still maintained both chains. So it has managed to drive costs out of Natwest without closing any branches. It has never really happened; never really materialised. I think, obviously, the thing that *has* happened was that these branches may run a little bit leaner. But there's absolutely no way of measuring it. Because the throughput going through branches, they can measure the number of transactions that are going through now, say, compared to 10 years ago. But because business keeps growing, the number of customers is always growing, the branches are probably still as busy as they always were. And all you can say looking backward is say 'we also have these Internet transactions; and what if we didn't have them? What would that mean if they were brought back into the retail network, say?'
19. **GS – For any such improvements that were achieved, has the Royal Bank found a way to attribute them specifically to an IT improvement, or Internet banking or whatever?**
20. VC – I have no idea; no experience in terms of metrics. I can't think of any particular thing that came out when I was there. We used to have a technology conference and it was largely that we'd bring the management and technology managers from with many were at quite a reasonable level - not just very senior – but they brought very senior business people in from executive levels; so, you may have 5 people at that level, and they might bring 1 or 2 of them. And certainly either they would be stressing the value that technology has played and the importance of it, and sometimes challenging it to do better or to reduce its costs or very much often to deliver in a shorter timescale. In some parts of the organisation almost cost is irrelevant. It's how quickly you can produce the solution. And you're looking at things that have a high profit value per transaction, things like the treasury where a deal might be 100m or something like that. If they can get a product for 3 months that's going to recoup so much money, even after 6 months then if it's going to disappear, they will do that; so you have a much quicker turnaround. But I'm drifting; I can't find a specific answer to your question. I think you would need to speak to business people within the Royal Bank. Have you spoke to anyone from RBS on that side?
21. **GS – I spoke to a number of people in the Royal Bank, from higher ranks to middle management.**
22. VC – I think probably you need to speak to business people because they control the spend. They are very interested on what return they're getting for that spend.

And they get charged every year a certain percentage of the total technology spend, just for costs of running the business as usual. But every year, each avenue of the business has so much money to spend in terms of technology development. And they control that spend and they decide what they want to spend it on, or what they think is going to give them the most return for money. Now, some of that spend might be taken up by people like the security people, coming along and saying 'hey, this system isn't as secure as it should be; you've got to fix it'. They might have other things like, it might be that the system is not as resilient as it should be; and this is from their perspective. But some of it might be new features; so it might be 'right; I want to deliver *this* functionality over the Internet now'. So it might be that they use some of this spend to do that. And they will work out the business case on that, and try and track whether it is making them money or not. I do know that certain Internet ventures within the Royal Bank still haven't made money, and still seem to be ongoing. You see, Internet banking is very difficult; I don't think the bank now charges for this service, so it's not really profit-making in that these things have a cost. But if it's bringing-in more customers or if it's retaining customers then it's adding to profits. Undoubtedly it is; but it's how you quantify it. It will be very difficult without doing some kind of a market research survey.

23. **GS – In terms of, again, the projects that you've been involved in, relating to Internet operations, what would you say were the most important unanticipated costs and benefits there? Because my experience from talking to people is that you have an initial target when you start; you do your financial evaluations, your NPVs or whatever method you may be using, and all the strategic assessment; and at the end of the day, it turns out to be something different. In terms of costs and benefits, which ones are the most striking that directly come in mind?**
24. **VC – In terms of benefits, I would imagine that a lot of it is on the intangible side. You know, things like 'winning a wars' or being recognised for having a banking product which is getting publicised in a magazine; you know "Royal Bank's Internet banking is the best" and things like that; it's like free advertising as regards the company. Unforeseen costs...{pause}...the biggest one I can think of would be just in terms of the maintenance of these things; the processes that go around it. It's fairly easy for the companies to work out how many servers they need to buy, what network connections they need to buy, what bandwidth they'll have. It tends to be at the last minutes of the project; it's the softer side, sometimes around security or...it's the cost in terms of things like mailings that they have to do to support this new service. So, it might be that you have to send details of the customers' PIN numbers; for the Royal Bank's banking service, they have a long character string. Well, actually this is actually good on perceived costs: they have a long character string there, when you first register for the service and you go online through the Internet, you get sent this string and you type it in. And effectively that stores something in your hard drive. It's part of the security mechanism in effect. It eventually gets changed but to a value that you don't know; so, keeping this bit of paper once you've entered it is no good to you. And probably one of the unperceived costs is that customers change their PCs a lot, you know. Not only that; they wipe their hard drive and start again for whatever reason; so you have to ring up again and it's the cost of having someone at the end of that phone to say 'OK, yes Mr Bloggs. We'll send you a new one'; another piece of paper, another first class envelope comes out to you and they re-register you again. So, it's not just that you forgot your password; it's like a one-time setup, but it wasn't as 'one-time' as people would like it to be. Even the cost of printing this thing was quite unusual, because they went through many different kinds of paper. Because obviously you have to be able to print it, but inside a sealed envelope. So, they went through many different tests on whether they were getting it done. Obviously the costs of the paper in the long run isn't a big thing; it's the cost and effort of**

doing it; so, it tends to be the small things that bite you; it's the details that get you in the end, rather than the very {obvious ones}. You know, if you think of what you need from an Internet banking perspective, you're thinking more in terms of web servers networks; and you think of all these things that are very visible and very easy to find the big costs for. But from a business perspective, it is all these manual details that come later in the project when you get down to detailed design. So, it keeps raising the cost levels quite significantly, which are difficult to assess. From a security point of view, the costs would be in monitoring the security of it; but also then just you can get led on, you know, wild goose chases. So if a customer rings up and says 'I think somebody has hacked into my bank account' the bank has no choice but to investigate that, and go through in very manual detail and try to work out what has happened. And very often it might be that the woman's son has got into the computer and knows the password or whatever; but the bank has to go through this expensive process of working out exactly what has happened and what the transaction was. It's a great cost; it costs money that you make nothing out of, but they have to do it. There was a very high profile thing a few years ago, and this wasn't Internet banking. I think it might have been telephone banking. Telephone banking with a PC at the end. Slightly different; not an Internet connection but a dialup connection. Someone had access to the Conservative Party's financial records and has seen transactions and what payments have gone out to whom. It was publicised on one of the papers. And we were the Conservative Party's bankers. And of course the story was 'Conservative Party bank accounts have been hacked'. So, the bank almost had to start an investigation as to who could possibly have had access to this information within the whole of the bank's employees. And trying to work that out is just a huge task; because you've got people that obviously can use this banking system and look at customer account details; so that's virtually everyone in branch banking. Although then there's some additional controls that can be put on sensitive accounts. But ultimately, all that information gets stored on a computer and on a disk somewhere. So then you've got to work out where all this information is stored and the various different copies of it, and who has access to that. So it might be developers; the developers have access to test data. Are they using copies of the live data for testing? They shouldn't be, but are they doing it? It might be people that have responsibility for managing the disks that moved data from one place to the next. Could they have read it? Would they know what to look for? So, those are the hidden costs in a lot of these things. If it goes to the external, the other thing was how someone have broken into the dialup systems; it covered all aspects of it. And those are just unperceived costs really. And when you roll it out onto the Internet, it gets much more {complex}, so you have to kind of swallow those. And some of those costs, they wouldn't be able to measure really. They'd find it very hard.

25. **GS – Were there cost issues regarding the scale of the project? Or time, or additional man-hours or whatever?**
26. VC – I think that's something that's kind of standard in any project. So, no project runs to time or budget.
27. **GS – What I was thinking really is in terms of unanticipated time overheads or the scale of the system or...**
28. VC – I would imagine, obviously from the bank's point of view, like the initial plan has to go through a lot of refinement. So, this is obviously that the business comes up with this idea; maybe technology people come up with the idea and bring it to the business side and say 'hey, what about the Internet? What are you going to do with that?' Initially, you know, it might be for instance that the initial business case might be worked out by, say, some kind of a systems analyst from Technology and the Business people in terms of how many people they need to run the service and this kind of thing. But costs then will get heaped up as you go through and you get



more and more people involved. So, for instance, they would have worked out maybe initially - and the bank has churned a bit about how they worked - but initially they would have worked out 'OK; what do we need to deliver an Internet service? Servers and we have to bring in people from Technology'. In the first banking solution, it would have been much later on that they would have brought security people on. And it would have been then that a lot of hidden costs would have come out. 'Yes, we need to go and bring all that security in to this design'. But also then, not only have we to build a secure system. But we need to prove it's secure. So we need to bring in a team now from some consultancy firm who are going to try and hack it. And they're going to come in. And before the system can go alive and put the bank's reputation at risk, we want someone to try and get into it and prove it *is* secure. Scalability and performance is always a big problem. There was a lot of money spent in that and a lot of revisions of estimates that had to be made for performance. And a lot of this was because not only were you dealing in a new business venture; you're dealing in new technologies that the bank hasn't really used and exploited before. So, for instance, from the applications side, it was writing-in technologies like Active-X and Java that the bank had no prior experience of. And in all those you were finding that this is quite slow... well, not slow; trying to find another word... well, irrelative. When you're dealing with large numbers of transactions and processing, it's a lot slower than some of the more mature banking systems that were on the mainframe that are written on low level languages, no graphical interface; you know, just number crunching. So, a lot of lessons would have been learned; in a lot of cases, the first time that we were delivering systems like this, was on the Internet; whereas now they're delivering similar architectures of systems, similar technology, but also for their internal users. So they've got much more experience of it. And maybe if it hadn't changed the development architecture, that side of it would be easier; I think that other companies that aren't in the Internet now, would find it a lot easier. Because although they're not on the Internet, they're probably using Internet-type technologies. And the other thing is that, when the bank initially launched these ventures, people with these skills and experience were fewer in far between. Even vendors that were selling products, really didn't know how they were going to scale-up before; whereas now there is much more experience.

29. **GS – I see. Regarding the financial appraisal of IT projects, first of all, is there a separation between the costs and benefits identification process and the costs and benefits evaluation process? And that's the first part of the question. To explain, it could be for example that you may have a group of people in the project who actually identify the potential costs and benefits; and you may have another group which is actually evaluating them, in the sense that 'this is a list of costs and benefits that are anticipated. What values can we attach to them?' Is that something that is being done separately in a serial manner? Or is it something that is done as a whole?**
30. **VC – It tends to be done as a whole. In terms of quantifying it, identifying and quantifying them. Yes, it does. It will largely be done by the same person. Now, he may have to go to other people to gather that information, but I've never been aware of it being separated. Now, it may be out in the business perhaps where they do it; we would have internal IT projects that would generate spend values. And in these projects, we would generate our business case, and largely we would identify and quantify at the same stream. I mean, obviously, how you would normally do it is that you would identify that; you'd write down and try and work out, you'd try to work it on brainstorming. Then, once you've got them, you would try and quantify them. But it's largely the same people that are responsible for producing those.**
31. **GS – My question was regarding the separation between different groups for these tasks and there's an issue of communication between them.**



32. VC – No; I think the interesting thing is that sometimes there has to be a project to look at the business case. So they have to kind of generate some high level document before they go into a business case and a feasibility study phase. And if there has to be a project, then you'll even some times at that point, they might have project managers assigned. And if you like, it's his responsibility for ensuring that whatever is in the business case is correct. But there's nobody that really validates it, in terms of saying 'well, that's preposterous, you know'. I suppose it's just at the end of the day, if it doesn't deliver... and they are trying to get better at measuring the business case, in terms of 'let's measure if we delivered what we said we were going to do; and that's one of the areas they said it would improve'. Effectively, the guy who came up with the idea was responsible for the good business case, carries the can. So, people make the decision based on that business case – they may query it – but nobody goes out and independently validates it.
33. VC - ...stages that kind of work in alliance with the bank. You know, the bank's different partnerships, like Royal Bank is working with TPF, and Virgin Direct I think is another one; but a lot of other companies set up their own like Standard Life are offering some kind of banking service. So they were able to do it without having the expense of a retail network. So that was good for them. It made it easier to get into the market for a lot of other companies; I suppose that's why maybe banks were very protective and had to go into this room. There were consultancies coming in and telling the banks – and the banks were paying them to tell them – you know, 'this is what is going to happen, you'll get many more new entrants'. And it's very much a fear factor, I think, that led a lot of people. And to be honest, it was probably quite right. I think the business cases that were created initially, with hindsight, may have not made much sense; but everyone who's got into Internet banking would say 'well, it was the best thing we had to do; if we didn't do it, we'd be struggling'.
34. **GS – In general speaking of Internet banking, first of all the level of competition, or better for example... let's use an example: all the other institutions like say TPF or whoever was an unrelated entrant is competing with the traditional banks on things like the savings accounts, mortgages and things like that, rather than on traditional banking products like the current account, which is a huge area. Is that something that new entrants are not looking into because it's not their thing?**
35. VC – Well, the other thing is that banks largely don't make money out of most of the customers' current accounts. They're high volume – low value transactions and it's just a pain for banks. So a lot of the new entrants, if they've targeted people, they've targeted people that have got real wealth, even for current accounts. I don't know if they have any income requirements and things like that; certainly it's 'we'll give you a good rate but you must keep like 1000 pounds in the bank' or this kind of thing. They've tried not to attract the lower end of the market, which makes sense.
36. **GS – Right. Let me now talk about the financial appraisal of Internet banking projects and so on. We've been talking about identification and evaluation of costs and benefits. Let me now just move on to the actual techniques being used in general for IT investment. And I am talking about the financial techniques, like the NPVs and the IRRs and so on. There is a contention, in general in academic literature – I think it's in the industry as well – regarding how these financial methods treat things like uncertainty; and my experience from talking to people is that uncertainty is just there, and there's nothing you can do about it. So 'we keep using the same methods while being more careful about strategic view of things about the future, because the future cannot be predicted' and so on. Do you see any value in applying, if you like,**

**different methods than the traditional financial methods or more sophisticated financial methods, or different methods, which are maybe hybrid?**

37. VC – I don't think so. I think the financial methods are a sound way to underpin any investment decision; but I think it should never be the only factor. It's never the only factor that you should take into account. You need things like your strategy and to compare this business case with this strategy; you know, other elements that come into the process. But certainly within the bank, or within the companies I've worked for, they all have their different methods that they use, and I would say they're reasonably valid. You have to use *something* but it's never going to be 100% accurate. Uncertainty is the difficult thing to quantify. Very often, in any project, you'll list your risks or your issues and you might be looking at maybe economic outlook or whatever. Some of that, like you say, is so uncertain that... Some things you put in every single time are just standard issues or standard risks. Well, 'we might get bought out tomorrow or might decide to do something different' and it's those kinds of things that add no value because they're always there {laugh}.
38. **GS – Well I was speaking about the 'less uncertain' ones; being bought out for example is a huge uncertainty.**
39. VC – Well, for instance, sometimes in a company you may have a strategic objective of being bought out. And that's maybe something that you have; it's not necessarily that it's not going to happen, because, you know, that's part of your strategy. But it's just whether it happens within the timescale. It's one of these things that you don't know whether it will or it won't. It can happen this year, next year or in 5 years' time. But it's one of those things: why put it down if it's always going to be there? You might get 3 months down a project and then it gets canned, because something has happened.
40. **GS – There are instances where the financial methods completely disagree with the strategy; I mean the result of the financial method; the application gives for example a negative NPV, or, speaking in terms of a payback, a very long payback; but however, the project is seen as – as we call it – a 'now or never' project. We have to do it or you're out. How is this balance being kept in your experience? I mean, if you have a project which is very positively seen from the management and the business case appears to be strong enough; however it gives a – not extremely negative but – negative measure in financial terms. What is the balance there?**
41. VC – It gets very difficult and obviously it tends to mean that the decision-making goes higher up the chain. Because you are trying to balance a negative NPV with an argument, which is a difficult thing to do. Because what you're saying is 'this project has a negative NPV but in the long term it affects the strategy in this way, or in the long term it's going to improve things'. In all the security projects, we were talking about improving bank systems, they're all cost-based. You know, how do you say we're going to make money? Because the security department used to have about 2m pounds budget each year to go and do security improvement projects. But where was the profit in that really? So, the bank never purely relied on the financial side; I think for certainly new business ventures, it does. So if it's 'right; we're going to go and suddenly jump into insurance', you know, like the bank had this great strategy and they said 'we're only going to do things that are within our strategy' and then someone came in with the great idea 'why don't we buy this train company?' Why would a bank buy a train company? Well, the fact of the matter was that the business case and the NPV of buying this company and keeping it for a number of years and then selling it, just was too attractive not to do. And that's what they did; they bought Angel Trains in London. They bought it against their strategy, against their core competencies and anything other logical,

but just because someone said 'well, at the end of the day, we're going to make money out of this'. In that case, that argument went over the strategy really. The financial case went over it; and the bank is a business; and it's led largely by businessmen that will look at things like that outside the strategy, and if it can make money. But also, they have to realise that certain of these projects, they are 'loss leaders' that will then return in subsequent projects. It's sometimes harder to sell it of the other person is trying to do it. But if it's something that is leading off your strategy, like the very first Internet banking application that you deliver, it's going to enormously expensive – well, probably not now. But obviously the more you can reuse the structure for subsequent applications, the cheaper it becomes. But a subsequent application might be from a different business unit. It might not be the same budget holder that it is for this one. So, it does get very strange. You sometimes have a financial model and given different business units, eponymous budget holders and profit centres, it can sometimes destroy the long-term approach; because everyone is looking into making profits within their own cost centre or within their own profit centre rather than saying 'well actually this is benefiting the bank, and we would reduce costs across the bank'; they're looking after their own targets.

42. **GS – So, it's kind of segmented...**

43. VC – Very segmented; sometimes some of these projects will be done outside the normal; so they may go through some special projects, it may go straight to the Board and be an exceptional spend, rather than being a spend that's coming from a business unit. So it might be this business unit is wanting to do this but actually it's going to benefit elsewhere. Sometimes the Technology department will prevent these things to the Board, and it might be technology strategy; they're saying 'actually we need to move into using the Internet and we've got a project here that's coming along, but there's going to be other uses for it'. I mean, the bank will now deliver many different applications across the Internet. It might be that they deliver them to 'old' customers – old to using the same branding. So as far as the customer is concerned, it might look like one combined application; but in real terms, the functionality that's in there might cover things like current accounting; it might be going in and looking into your credit card balances, which is a completely different business unit and completely different application. So, the customer sees it as one proposition, but it's different applications and there might be some other side of it in then that sells insurance. If the bank had just looked at maybe the NPV of Internet banking, which wasn't a big issue, but if it had; if it just looked at it in the basis of just doing current accounts, then that would come up as being very negative NPV. And it might say 'oh no, we're not going to do that'. And every single application then would come along, like credit cards, and they would all have a negative NPV. So someone has to pull this big picture together, which might be a bit more visionary; it might be a little bit less number crunching; just saying 'hey, we need to get some kind of a presence out there'. And certainly to a certain extent, a lot of these things are experiments. The royal Bank thought of tying it up and creating a current account mortgage, where you use the value of your house as a basis of what you can lend and you tie all into one account. So it becomes something like a combined savings, mortgage, current account. The bank was very interested in doing that. Now, I don't know where the idea came from initially. But what it decided to do was rather than market it for itself and not be sure what the take-up was, it experimented with Virgin. So, if you like, it agreed to do a joint venture with Virgin, put in half the money, do a lot of the back-end technology systems, but it was an experiment. And the bank says 'it's a good idea; let's experiment on it. If it fails, it's Virgin that fails'. It was all Virgin branding. And it was very much 'let's suck and see'. And some decisions *have* to be made that way. There's almost no way to accurately predict. And so, a little bit of experimentation with a budget that you can afford; you know, it's like going to the casino {laugh}. You only use the money that you can afford to loose. And sometimes they will do



that. I don't think it's a cavalier management style but sometimes most organisations need to gamble a little bit. Otherwise they'd become very stilted; they would never think out of the box or move out of the box or do something different.... this is actually out of my dissertation {laugh}.

44. **GS – What was it about?**

45. VC – On cost models for computer security for managing security in an organisation. It's a very short read {laugh}; the shortest dissertation of the year.

46. **GS – My next question is about, you know the financial techniques that I was talking about, and things like attaching values to uncertainty and so on. I don't know if you've heard of Real Options Valuation; it's a method being used – well I don't know to what extent it's being used practically.**

47. VC – I haven't. It doesn't ring any bells; no.

48. **GS – It actually goes back to option pricing in Finance and it actually deals with strategic options as if they were financial options and measures the value of exercising the option now, or deferring it and so on. This is supposed to attach some value to uncertainty, in the sense that, for example, making the decision to go for a project, not doing it now but doing it in 2 years etc; all this had a value attached, which is not real value, but a value which aids in balancing the decision. It is attaching a numerical value. You said you haven't heard of it. However, anything in these terms, would it be something that the bank would be looking at?**

49. VC – Well, I've been out of the bank for 2 years you see. So, if they did use it then, I wasn't aware of it. The only kind of mention was NPV and IRR. And I think 2 years ago it was quite commonplace to use ROI or whatever.

50. **GS – Was all that based on a central template?**

51. VC – Yes, and in fact there was different ways of doing a business case, because some would be purely financial, others would be a different category almost; in terms of 'OK, this hasn't got a financial benefit, but this is the reason we need to do it anyway'. And some of it is compulsory of course; it might be meeting external audit requirements; it might be complying with FSA regulations. So, it is 'we've got to do it and this is how much it's going to cost'. But no; not that. Like in IBM I'm not sponsoring projects and very much we're just engaged by customers; we come under the site and deliver it. I don't work in a pre-sales side where we would help to do a business case or anything like that.

52. **GS – I see. I'm just going to return to things you were talking about before; on things like the valuation of intangibles and attaching values at them, and doing all the risk analysis and so on. Is there a case for attaching values to what can be termed as 'Knowledge' (and we spoke about attaching value to information and how sensitive this is) arising from implementing the project?**

53. VC – Well, yes. It's not something that we do from a security risk analysis point of view; but in terms of a business case, a lot of projects would go ahead on that. You know, it would be 'let's tackle this small thing, just to see whether we *can* do it'. And then the knowledge that we've developed from that... almost you might be doing this project for really no benefit. It may have no particular financial or business benefit; there's no large driver; it might be a nice-to-have. It might be just something like that. But 'let's do it, and let's do it using this technology, because it's a nice self-contained exercise in which we can learn'. And that would be quite commonplace. And we might be saying that at the back of it, you have to underpin



that as to why you want to develop this knowledge or why it's good, or what you're trying to prove. Sometimes it might just be adding new functionality to an application; you might be linking 2 different banking systems. So it might be 'let's see if we can – when they're going through *this* route – see the account balances of this other system. And if we can develop that and prove that, that might lead to a more expansive system where we can deliver a fuller functionality'. In a lot of cases, from technologies' point of view, there are small {trials} like 'let's see if we can do this with Java'; 'let's see if we can do this with this new thing that's coming along with Technology strategy, looking at Cobol or whatever'. It could be a new technology and very much they will look for somewhere where they can experiment with it first; somewhere that's safe, where they can see whether they can deliver, where they can test the technology. But also work out and give people that learning opportunity to learn in a fairly low risk environment. So there's been many projects I could think of where that has gone on for different technologies.

54. **GS – Right. Stemming from all these projects, how was this knowledge codified? Was that just in the form of documentation? Where I am actually leading at is post-implementation appraisal: is it something that you were doing in the bank and then use it for the next project? And have you found it a useful exercise?**
55. **VC –** Many projects would have post-implementation reviews, and these would be formally conducted by a facilitator that would come in and bring all the appropriate parties. Yes, the information that comes out is valuable – not all the information but most of it. Sometimes that information will lead you down the decision not to use in-house resources; the fact of running a small project and seeing how complex it is and how different it is to other skills that we've got in the bank; perhaps we're better off just bringing-in a firm to do it. So, it would very often lead to those kinds of decisions. It *may* lead to a decision that 'actually this kind of technology is very good, it's very key, and we've got very few skills in the bank, so we need to bring in, or we need to retrain'. So it can affect decisions quite a lot in that way. It very often happens. Largely with new technologies, which are attracting interest, such as when the Internet first came along, Object Oriented Programming techniques (OOP), probably – this isn't from experience – I would imagine things came in like XML. So largely as these were new technologies, that would be a common way of doing it and working out how it would fit almost. So, someone would evaluate it, you know as a desktop research piece of work, but very much then it would be about experimenting with it in a very small and low risk project. Maybe sponsoring something and bearing the cost or it from some central budget and say 'we're looking to try this out somewhere' and going to a business area and say 'we're looking to trying it; we thought of this; what do you think?', and the business might say 'well, not too interested on *that* but what about *this* little thing here?'. So there's an element of that that goes on for sure and it's a very valuable exercise. And there will be certain budgets that are set aside for that every year; but there would still be some kind of evaluation that would go on, or a business case behind it, but it is a little bit of an experimentation.
56. **GS – Right. Speaking of acquiring all this new knowledge on things like XML and so on, I wanted to move on to the issue of expertise. As we're talking about banking and financial institutions, there is the traditional banking expertise like bankers and actuaries and all these people that work in the company have, and there is the issue of IT expertise, which with the more extensive use of IT has become quite pertinent. From your point of view, within the bank, which one of those 2 (or if there's a third one) would you say is the more pertinent expertise currently for running, for example, an Internet banking operation? Does it have to do with the traditional or the IT expertise? I know it's a difficult question.**

57. VC – It's a very difficult question. Obviously originally you only had one, which was the banking expertise. The technology wasn't there; well, it all depends on what you call technology, but you still had almost systems engineering even when it was paper-based in a way. So, you can't have one without the other nowadays, which is a strange thing. I come from the technology side but at the end of the day we're only servicing the business in effect. So, from a commercial point of view, it should still be that the power lies with the businessmen; they're the wheeler-dealers if you like. If you left them to specify a system, it wouldn't work; and even like you would find a lot of the technology people are actually adding real business terms into systems; they're not just taking a basic set of requirements; they're actually thinking of new things, and say 'have you thought that we can do this and we can do that'. And it is very much a partnership I would say. I wouldn't put one higher than the other. I would say it's a partnership and the boundaries are very merging. Obviously, at this end, if you've got your businesses, at this end, you've got some very businessy people – high or low level – then you've got some pure techies there out now just saying 'give me a set of requirements in a rank order and I'll diagnose faults'; but in the middle, it's very very grey; you have business people working in technology departments, you have very IT-literate business managers; you know, like BB. Very current, very with it. So, does he think of himself as a banker or a technologist? And it's a very grey area now; obviously, in the initial days, back in the late 60's or early 70's, these were completely separate, but now most people have got such a good understanding of computing at one level or another, and you get a lot of people with computing degrees that are in business, and you get a lot of people in computing that have business degrees. It's very blurred. I think it does add value and certainly organisations, and particularly Royal Bank, were very keen on blurring those edges. The business people would often pull technology people into the business, and vice versa. You'd commonly get business people working in technology; they might just be coming in for a year for a special project.
58. **GS – Well, is this creating a new type of expertise? This grey area you're talking about.**
59. VC – Yes. And it does have to be fluid though. Doesn't it? You can't have two different sets of people speaking different languages and no one understanding. You have to have middlemen that can work the harder side of the facts. I think they're equally important.
60. **GS – Right, I see. Before we close. Would you recommend any people that I should talk to? You were talking of BB before.**
61. VC – BB, it all depends on how valuable your time is. Another guy you could speak to, who would be very happy to speak to you is a guy called RW. And I tell you what he does. RW was in computer security; he used to be my manager for a while and he moved into the business, working on e-commerce projects. Not pure banking in effect, like current accounts etc. I think there's a danger: you speak of banking and sometime people think current accounts; and there are so many different systems that they operate. So, he's in e-commerce systems. One of the things he did was help setup a new venture, like a joint venture, which was very much like an experiment, if you like. He has a little bit of maybe financial appraisal and stuff and he's now moved a little closer to the business in terms of doing this. One of the systems that they settled was a tendering system. One of the things that banks did when Internet and e-banking came in, was that they thought they could play within things like trusted commerce, because everybody trusts a bank. So, that thing is like a trusted party or the middleman between ventures; so, the tendering system, I think the idea was to try and secure Government contracts as a Government tendering system. So when the Government has something that it wants to purchase, then the Government has to go through a formal tendering

process. So the idea was to have this tendering system called Tender-Trust and basically the Government would draw-up its tenders, they would get put on the system, the system would then send it out to the appropriate accredited suppliers. So, if it was for toilet rolls, it would go to the toilet roll manufacturer, if it was for stationery, or cars, you know. So there would be all these people that would effectively subscribe to this tendering process. So, the tender would guarantee delivery of the invitation to tender, it would enforce the cut-off date so that you can't have anything coming in later, it would give you a proof of receipt, a trusted timestamp and all this kind of thing. So he set that up as a joint venture and even the software was developed by an external company. And that was about 3-4 years ago; now I'm sure he'd be working on another different business interest. Can I think of someone else? It would probably be good to get someone from the financial perspective actually. Within Technology, they always have an accountant that works purely in technology. And if you're looking into financial appraisal, it might be good to speak to someone from that perspective. Now, I can't remember the guy's name, and it's not definite that he's still there, but there would even be a small team of them. And it would be worth getting in touch with them.

62. **GS – So, is it some kind of technology financial appraisal group?**
63. VC – No, those would deal with all kinds of things, such as the costs of technology currently, how it's apportioned back to the business. But they may get involved in some financial appraisal for new projects as well.
64. **GS – Well, if it comes to you, I can actually send you a reminder email and ask you.**
65. VC – Well, I mean the other way would be just to go and speak to someone like... a good person to speak to could be SN. Very senior in Technology. Not sure that you'll get hold of him; but he's the guy that would have the knowledge in effect. He's been the Head of IT services. He's been the Head of Strategy. Going and speaking to some of the technical strategy people might be good actually. In Technical Strategy there was a Scottish guy called...{pause} Send me an email. Because I still know people at the bank and I'll ring them up. Another guy is Warwick Wilson; actually he works in Technical Strategy. He's a great guy, he'd be one or two steps down from the Head of Technical Strategy; lots of experience; plenty of time to speak to people, honest. If you can get in touch with him, he would give you a lot of good information. And I would imagine that they would work quite closely with the business units as well. But I'll have a think about it and I'll drop you an email.
66. **GS – Right, thank you. A last thing: more or less, we had a 2-hour discussion, so you know more or less what I'm looking at. Do you think that there are any areas I'm not looking at, which I should be looking at within the purposes of my research? Do you feel there's something I'm missing there?**
67. VC – No, I started reading today this 2-page document that you sent. I think the only thing is that you have very wide coverage there, and I think the bottom line of what you're trying to deliver, is it how you can improve financial investment appraisal? Is that it? I was trying to draw your overall aims.
68. **GS – What I am trying to figure out there, is to have a better conceptual model of how you can appraise, either way, be it strategically or financially, or other ways...**
69. VC – So you want to come up with a model or a methodology...



70. **GS – Yes, something like that. Although I am quite confident that this is something that you cannot deliver in full; but it is not a specific methodology {I'm looking for}, but it is actually about pinpointing the contingencies of this type of IT projects, like the Internet-based ones, and say that, for example, we have all these characteristics that usually these Internet banking projects have. We have characteristics of the Internet infrastructure, the business, which is banking, and the money side of things and the trust side of things and we want to build a picture that is more accurate to appraising - financially or strategically or either way - the case.**
71. **VC – I think the interesting thing about it, other than some of the decisions that have been made in the past to go into Internet banking and go down this new business avenue, but a lot of what we've been talking about hasn't really just been Internet. It would be applicable to anything. And I do remember that you did say that in your proposal – if this could be broadened or if it is relevant to anything else. So I don't want to say that the Internet is almost something that was new and now isn't in a way in the UK; I was working in Ireland, in the Bank of Ireland and they're only just launching their first Internet banking service. And it was only to selected customers and it was called like a 'wealth system' and was addressed to the richest customers effectively; High Net Worth customers. So, yes, but it's like a lot of the decision-making process and some of the things that you've kind of drawn out like whether they use it to acquire knowledge and this kind of thing, those would be appropriate to any new technology that's coming along. And techniques, it's like when Internet banking first came out, it was all about using browsers, and even the ways their applications were architected were different; code was written in Active-X or Java that was downloaded to the browser. And they ended up to when the user went online, not only there was the downloading of the interface and the pictures; they were actually downloading lots of code that was going down. And that was one of the things that was maybe tried and tested, or experimented on. That was something new. And now, even that is moving away, so rather than code going down to the browser and running like JVMs or Active-X on the browser, they've realised that this was slow, especially over telephone speed and things like that. It's also very hard to secure that browser end, because the browser has to trust the code that's coming down. And this code could be malicious and go off and do whatever it wants really. And now it has moved back a little bit, in that it's still browser based, but they're actually creating applications servers, and the browser is just sending HTML now to this, and all the processing is done in here, that sends then rendered pages back. And, if you like, all the stuff that we talked about going into Internet, and the process is now being used about decisions like that or whatever the new technology is that comes along after that; it's very much evolving. It is very good; I don't think you missed anything out. I'm just not sure whether it's just specific to Internet banking, you know.**
72. **GS – I see. In the wider outset, what I'm looking at ultimately is bringing myself out of the picture and saying 'what can we do with evaluating technology?'. So, one of the ultimate aims is to see how that works on Internet banking.**
73. **VC – I certainly didn't mean it to be a negative thing.**
74. **GS – No absolutely not. It's very useful what you said. Effectively when you're doing a PhD, you're looking for criticism, rather than looking for compliance. From your perspective, which is a business perspective, I may be too wishy-washy about things or be too academic about things, so this is why I am talking to industry people.**
75. **VC – In terms of the financial appraisal stuff, what methodologies do businesses commonly following now? Is there some kind of recommended reading?**



76. **GS – From talking to people, what I understand is that they're using the good old methodologies like the NPVs and the IRRs; effectively most of them are not looking into something different for either reason. Either they think that 'analysis leads to paralysis', as one of my interviewees said, or the other is that it's not really useful applying very sophisticated methods to guesses. So, that's what they say. Now, there is a host of methods...**
77. VC – I would have thought that there would be certain companies that sell training systems or appraisal systems; stuff like staff appraisals and methodologies or even recruitment processes that is like 'go through this type of interview, then do this, then there is this psychometric test'. I would have thought there would be companies that said 'this is the best way of doing investment appraisal'. Is this a kind of an untapped market altogether? So, is there no one really going in and helping businesses making these decisions?
78. **GS – I'm not sure that this is an untapped market, but it could be. In the literature, for example, you come across hundreds of methods; I have actually a very brief table, which is adapted from a book; and this guy is talking about different methods there {GS shows the table of IT appraisal methods}. Do these ring any bell at all? Any names? I'm not actually in a position to explain all of them and how they work but they are trying to bring Finance and Strategy together or try to use things through portfolio approaches. So, there are things moving, theoretically, to a different kind of appraisal of IT because all the more it is recognised that IT has specific characteristics like all of the economies of networks kind of thing, shared nature, and all that lot. So at least in research it is being treated in a different way; this is where all the things about uncertainty that I was talking about come from. But in practice, at least in the banking sector – I've only been talking to banks – they either are not interested, or they're not actually looking into {new methods}. There were very few people who thought that this is an interesting idea, changing their methods.**
79. VC – I think, the interesting thing... I find it strange that there isn't {an interest}. Because I can't even remember having to go to any kind of training within the bank to produce this business case; we just used to do it. And you might have had a template or a style or whatever to follow and you might have seen other ones. But very much people did it to their own perspective and without that rigorous analysis. Like, quite often you'll have someone who has an academic idea. And that gets spared down to a more practical one; you know 'we don't have all this time to do this; follow these basic steps which is the core of it'. That kind of thing, I would have thought, would have been good to have so that we all took a common approach. Because I could certainly see it with the different ones that we've created and the different people that created that. Somewhere, far superior to others in a way.
80. **GS – I don't know; maybe it *is* an untapped market;**
81. VC – Well, it's just weird; maybe just because I never really looked for that kind of training before.
82. **GS – I think big consultancies are all the more using their fancy models that they're developing in-house or which they take from academic research and try to adapt to different types of businesses.**
83. VC – Within the organisations, for instance, they will change their tools and techniques every couple of years. Just because someone is using {new methods} or to stay fresh or whatever. Evolutions in it are inevitable but you know they will

follow one track for project management; you know 'this is the methodology that we'll use'; 2 or 3 years down the line, they may be investing a lot to say 'we're going to use this new methodology or this different methodology'. I can think of project management, staff appraisal, but I can't think of anything like project initiation or business case financial appraisal. It was more like 'here's what we've done before; read that and see what you can do'.

84. **GS – Something like an ad-hoc kind of approach.**

85. VC – Yes. I'm not saying that it would ever have to be some huge system, but even just something like 'when you do this, then you do that; consider this...' and so on.

86. **GS – All right.**

87. VC – The other thing that I could do is try and find someone in IBM that you could speak to. I will ask around. There are 2 guys I know and they're with IBM and they work with our larger customers; not particularly Internet projects; but they will get very heavily involved in financial appraisals, working with the customer.

88. **GS – That would be a very interesting source to look at.**

89. VC – Yes, my role is on the service control; they're on the pre-sales side and very often the customer will come to them and say 'we want to do this; can you help us with this business case? How would you do it?' So they work with the business from that perspective.

90. **GS – OK. Thanks for all that; you've been very very helpful. I'll be in touch; I'll send you an email and once I manage to do the 2-hours transcription, I'll send you a copy to read through and see if there's anything you'd like to change. It will be treated confidentially. But sometimes people come back and say 'well, I shouldn't have said that'. It's my routine. OK, thanks very much. I'll be in touch. Cheers**

91. VC – Cheers.

## 1.6. Interview, 10/10/2002

1. **GS - I'll just tell you a few things about myself and where I come from, then we can go on and discuss things - especially things I want to discuss relating to investment appraisal techniques, practices, decision making. I am originally an electronic engineer and I worked in telecoms for three years in Greece, that's where I come from, then I did the MBA here in Edinburgh and I'm doing the PhD now. The PhD is about information technology management and the key areas I'm looking into are practices and methods for investment appraisals specifically for IT projects but specifically for internet banking projects and what is actually fascinating, especially about methods of appraisal, is that often it is that these methods play a role, not as tools of decision but as tools of persuasion. So that's more or less where I come from so would you like to tell me a few things about your own background and what you do now.**
2. **ML - I'm actually an accountant. I've been working in this division - I was previously I was in general finance, basically just balance sheet and P&L management, but I've been doing this role for about two years now and as I said the division I work for covers all areas. Our division is retail direct and mostly we cover all direct facing - direct to the customer, so you're talking about internet banking, call centres, we cover direct lines... one of our divisions is Virgin... I don't know if you've heard of Virgin One account - you know those sort of areas, so it's all direct customer-facing business. So, I think that's where e-commerce fits in... Today, I think because of the recent market conditions, we haven't had many people on our projects actually go through, but basically what I do is, from a divisional point of view, taking into account the divisional strategy, group strategy, I have a look at the financials.**
3. **Basically what we use - I've got a copy of the model here - we've got a group-wide model which is pretty generic... it's feasible to have a standardised format... I can give you a copy of that away with you. So, basically, we use discounted cash flow techniques, internal rate of return and quite a lot of the time, certainly, residual values... internal values is an important factor as well in things like e-commerce and Internet projects because we also take into account for that sort of intellectual property rights and disposal of any assets that we have. I think they're not as much used in the day to day business now, but we did very regularly in the beginning when the Internet took off. Certainly in the mid 90s, with Natwest in particular when we merged, we were heavily involved in investment in the Internet industry. Personally I don't have that much experience in Internet projects but certainly when you're looking at an Internet project as opposed to purely a financial point of view we've got to think 'is there something we can use?', and certainly we look at certain market conditions, take into account ... and that sort of thing and whether we think it's something that we should be introducing now or maybe something we should be investing in now or that it's going to take off a couple of years down the line. For example if you were to take PayPal in America and there is technology to introduce something like that, it's available in Britain but whether or not the British market is ready for it just now - you know we've got to take into account that sort of thing. So although that model is standardised it's only over five years as well, so it's very difficult for these types of projects to use more a generic model like that. What we tend to do is - part of my job is, I look at the sort of financial viability of the supporting evidence that's used to create that sort of market volumes and that sort of thing and basically just to stress to us the numbers that E-Commerce Division come up with...**
4. **GS - As you said, these projects have started - well five years from now or something like that. How has your perception of the financial appraisal side has changed from back then until now. I'm talking again about the market**

conditions as well - back in 1996 and actually a bit closer to today- 1999 for example, there was a huge internet frenzy and so this bubble has now burst. How has this all change in market outlook, changed the way that you are doing the investment appraisal.

5. ML – Right... I think... what we perceive to be our learning is the fact that, everyone jump on the sort of backward thing that was happening in the States. The general UK attitude - it's all about - when you're looking at it you're looking a mostly at the UK attitudes and the attitudes of PC users in the UK. I think early in the beginning it was like jumping on the back of America expecting the market to follow in the shape of America but I think the UK attitude is slightly more adverse to change and you know... just in general... we think - you know our perception is that it will happen, so the view of not planning on selling off investments and things like that - our perception is that it's going to happen but not quite for some time yet, maybe in five years time, but there's certainly a time lag between what's happening in the States and what's going to happen in the UK.
6. GS - Were there any regulatory issues that were taken into account. As far as I know the banking environment in the States is totally different than the banking environment here in the sense that there's different states, different regulations, different.....
7. ML - We're quite luck in that we only have one Regulator which is the FSA... well, not only one Regulator but that's our main Regulator. The thing is, most of the products aren't essentially banking products... we've invested in third party {coffee machine in background}. The FSA has actually become involved and there have been compliance issues that we have on certain projects and we have to think - just basically for risk aversion and things like that... and certainly...{pause}... I don't want to talk about this {laugh}... Some of the products we have and that we're working on, have just recently been investigated by the FSA and whether or not there should be some registry of compliance put on to them. Basically what we do is, in five years time we're going to be like "we can launch them just now", prior to all those - we wouldn't have quite as many issues – but basically what we would rather do is we're going to have to invest in technology and stuff to make sure that these are all complied with and all the risks addressed, particularly for fraud which is a big issue in Internet transactions, before... prior to launch as opposed to post launch. It's very difficult because traditionally we've been a bank and we're subject to sort of... - we tend to concentrate on banking constraints and things like that and as I'm sure Andrew will tell you, it's frustrating sometimes {laugh}.
8. GS - Yes, I'm aware of that.
9. ML - I think basically what we've got to look at, the most important thing for us is risk management and also we have to look at whether or not if we get involved in a... say, for example, if a product was about monetary transaction, whether or not this would lie with us and whether we would have to take some provisions for that. That's the sort of role that I play, is to make sure that we've got all the provisions in for the product, that everything's due to go, any compliance issues we have will be addressed and that sort of thing. I don't know if that answers your question but....
10. GS - Well kind of, I have lots of questions! {laugh}
11. ML - It's very difficult to discuss it without talking about particular products because quite a lot of the products that we are investing in, are not traditional banking products; they may not be traditional banking products. I don't know how much detail Andy went into with you.



12. **GS - Not too much detail, Andy was talking about more strategic perspectives and things rather than the financial aspect - that's probably why, because I requested that I speak to someone who's more related to finance.**
13. ML - Certainly what we would look at is whether or not we should be developing the product in-house or whether or not we should be looking to a third party to develop it, and that can minimise our risk as well as a financial institution.
14. **GS - When you speak of the product, are you talking about the financial product or are you talking about.....**
15. ML - Any product - I think most of them tend to be related to financials being the institution that we are, but there are some that aren't. Certainly we tend to... initially there was a sort of drive to produce a lot of technology in-house. It tends to have moved away from that now and let the experts get on with it - we deal with third party people. We've gone to the inside and look at the pricing of products and things like that - you know, whether or not we're going to... if we do have a third party, whether or not it's going to be a price per transaction over the Net and how our viability would come into that.
16. **GS - What would you say is the role of using an alternative channel like the Internet in how these products are engineered. Does it have anything to do with financial engineering. Does the channel play a role in the way that the products are being financially engineered - designed.**
17. ML - Yes, definitely. For example, if... {pause}... Originally we were actually providing the facilities, the technology and all that sort of stuff and basically there would be a charge per transaction, then there would be like a licensing charge, and then there would be obviously a charge for utilisation and maintenance. As opposed to that, there has been a shift towards licensing products where they'll be someone who developed something then they would license it then it would be a transaction basis... The financial drivers behind the pricing and things like that have changed from - originally it was about return on investment as well as additional income and also entering a wider market place and certainly now our strategy is a shift away from that and you'd be looking to be a per-transaction charge for Internet use. There are some products that we've been involved in that have originated from within the bank and are not necessarily financial products. For these again, it tends to be restructure, the pricing structure relating to it, tends to be based around the number of transactions and things like that. That's certainly the way that it's gone...
18. **GS - Are these based on estimates, because once you set up an Internet channel, you can more or less monitor the number of transactions you have, what kind of activities you have and so on. So in order to, for example, design a product that can be appropriately priced as an Internet product, as you said the pricing structure and so on, what are the main issues that are being taken into account there? Is it the cost of utilisation of the channel, is it the patterns of behaviour of the customer?...**
19. ML - You've got to take into account quite a few factors though. You've got to take into account specific target markets, whether it's going to be an international product, whether you think you're going to require some sort of ... and the use of that because then you have to sort of lease that from elsewhere. When you do that, you've also got to take into account, if you're using for example the financial product - if you've got someone using it in another country; you have to take into account the foreign currency hedging and have to ensure that that's built into the pricing structure. You've got to take into account if there's going to be any

transaction codes, it's basically if there's anything that we will be passing onto the customer in terms of pricing and how it's going to cost the customer, how much we're going to absorb internally and of course you're going to look at, third, is it cheaper to produce it internally or to get there someone near with it and then what we look at is looking at the structure and how the pricing should be made up and then you're going to look at - within those specific markets, we would be aiming for Asia, the US, the UK - you've got specific user groups and they're different. So basically your checking up demographic make up, attitudes towards the Internet - whether or not people are willing to accept it. And there have been quite a few studies... We do rely a lot of external studies or demographics and things like that, so we would be looking at attitudes of users, how many people have PCs and that sort of thing and basically then you would do a bit of sensitivity around those numbers, do some sensitivity around the transaction costs - how would it increase our profit, then we would do sensitivity around the volumes as well in terms of market size.

20. ....looking into something and someone in the US is already doing that and people are ready to move into the UK market - we've got a mature product and is it worth our while investing in this; ...do you think we've got something that we can bring to the table that would make this slightly better? I think, certainly in financial terms, a lot of the regulators have actually cottoned on to the fraud and the financial issues around the Internet usage and it's certainly becoming a lot more regulated. In the US there's PayPal and Greyhound and they weren't previously banks but they were involved in financial transactions and storage of financial information... and I think - I'm not sure if they're up to speed but - I do know they are beginning to be looked at in terms of regulation and as a result of that, in the UK the FSA is certainly - you do have to be regulated before you move in the Finance industry, you do actually have to be regulated if you are going to be storing financial information on the Net and then if you are going to be conducting financial transactions, then the FSA do have some compliance... I'm not actually up to speed with all that, but I was speaking to one of the governance guys on that - I'm sure I've got the details of it somewhere if you don't have it - what the actual regulation was. Certainly the UK is more regulated than the US in terms of financial transactions over the Internet and bringing new products to the Internet.
21. **GS - I was planning to start this from another way, but if we start it this way... it's a semi-structured interview, so it can go anyway! {laugh} Let's talk a little bit about investment appraisal techniques. We were talking about the centrally - this template I presume it is, for using the NPVs and the IRRs and so on. First of all regarding the - just as you said - when you have an Internet project you're not just looking on the financials; you're looking at different things and so on just as in any product; do you keep the financial side of the appraisal separated from the strategic one?**
22. **ML - No. {laugh}**
23. **GS - You wouldn't say that.**
24. **ML - I wouldn't say that - certainly it has to start up financially. I mean if you've got something that had a negative net present value we wouldn't automatically discard it. The type of business that we run in our divisions only - because we were developing the new businesses as well - ...a lot of the projects that we undertake don't have positive NPVs - you've got to look at it at long term strategic things - that's a big factor for Internet products, especially because it's development costs that are associated with some of the products, but then the thing is, all the time, particularly in banking and in on-line banking and things like that, all the time our customers are looking for 'what can you offer us now?', especially the sort of technically savvy people, of which there are a few out there and in terms of customer service, if we're not providing that to them, we're just**

- leaving ourselves - we're going to cannibalisation from other banks and things like that. Certainly financial factors do come into it... certainly NPV and the Internal Rate of Return... it's like 20 years down the line, you'd have to look at it... I don't think so... but the financial figures for that type of business tends to be strategic issues that are the decisive factor, the business supporter, as opposed to financial.
25. Part of us used to say 'well we're not happy with that, we quite like the idea but could you come back with an advised financial model?' – perhaps to share with the E-Commerce department to say 'well we're not happy with that; can you do that any cheaper?', you know things like that. And that's where external sourcing comes into it and that tends to be slightly more cheaper for us because then we're just charged a rate per transaction which dramatically reduces development cost. I mean, that's not a strategy that we would pursue it's just one that if the costs were particularly drastic and the return wasn't quite as much and it was just basically customer retention, then we would go looking at sort of revising costs and try out other options.
26. **GS - How would you say the role of the finance function has changed through the years?**
27. ML - I think it's become... the finance function is traditionally dual number crunching and we're the ones that are there to provide the end outcome and the sort of strategic issues - there were your strategy guys and your innovative guys, but I think it's definitely merged now and I know definitely within our department, you've actually got what we call a Central Support Function and that's where the Strategy guys and the Finance guys and we all work together to come up with solutions and bring the individual business units in line with... and the thing is as well, we've got such diverse divisions; sometimes we have to pull them back a bit and say, this is the overall Group strategy; that's the Group point of view. But certainly the Finance position I think has developed, so much so... I think you still have your traditional number crunching people that are there to bring out financial information such as your statutory accounts and things like that, but they're all instruments that you use - eventually you would use to actually pursue strategies and things like that, so it's certainly not as it once was perceived as the man in the accounting machine. Certainly in my job, although I worked in Finance, I tend to speak more to the Strategy guys than I do with the Finance guys within the business units, certainly within E-Commerce. But yes, I think I see Finance is coming into... There's certain aspects of Finance that are coming into the support function and there to provide information for the people who want to make decisions and the people who have come up with innovations - they might not have the tools to gather all the information that they require, that's our job as well I would say.
28. **GS - Regarding again the relation and the interaction between the Finance function and the Strategy function, Operations function and so on - could you more or less give a very brief description of - you know, once such a project like an IT project - this is mainly what you're talking about, IT projects with a specific gearing to internet project - what would you say the process for, or the overall approval of such a project would be.? First of all, once there's a number of propositions on the table and these completes for a budget; First of all, does this competition between the IT projects or is there competition between IT projects and other investment projects for an overall budget? What I'm actually asking is, is there a case of having an IT project competing with a non-IT project or is it a specific IT budget?**
29. ML - The way that we're structured is we have a separate division which takes care of all the IT and basically - you've got to look at factors, it might be a budgetary constraint; it might be a resource constraint... In terms of actually competing, in the end an Internet-focused project could be up against something



else, something in the branch network that might be required, that require some IT skills... so, again, I guess it's the rationalisation of resource as opposed to budget... There's a limited number of people available for Internet geared projects and they maybe required to do something else. There's more and more people getting into it but it's not so much initial effort, - before it was - but we've got people working on specific Internet projects and to pull them off these projects, you have to ask whether or not it's going to be worth it, the payback they're going to get and that sort of thing.

30. In terms of the actual decision making process, what tends to actually happen is, within the structure of our Group, within the business units, several propositions will be put together and passed on and then the business unit Head will decide then which ones he felt were best to go with. He would then prepare a complete business case - that would come through our department, which would be myself and my boss. Depending on the value of the project, we've got a whole internal control system as well and they should approve what projects... but certainly the decision would be made at that point, whether or not to pursue this project or not. At some point we would expect to see some sunk costs on whether or not it's a viable proposition because, with the fact that most of these are based on innovation and the thoughts of other projects, whether or not this can actually be done, there always will be some costs. At that point we decide, okay we can go ahead with this, this can be done and would be looking strategically and financially to become involved in this product and then you've got, do we have the resource and capacity to actually cope with it internally and that's basically how the decision is made. It's mostly I would say a strategic decision all the way up until you get to the higher levels and then it becomes 'is it a financially viable proposition?' and it's not until you sort of get to Group level - we try to encourage people to put as many ideas together - there's no restraint on ideas - that's the Chief Executive of E-Commerce... that's his job to decide that... Certainly it's only when you get further up the hierarchy structure that the financials will start to get more important.

31. **GS - Again regarding the investment appraisal techniques: There are a number of - I would say more sophisticated methods that have been around for quite a few years, I don't know whether you would use them. Things like Real Options Valuation and different methods which are more specific to IT but are not very different financially, but which attempt to integrate the strategic and financial aspects in one tool, rather than in an organisation-wide way of working. Are any of these methods something that you're looking into?**

32. ML - Certainly at my level no, whether or not Group Economics are looking into that, I'm not sure. I guess the problem that we have is because of the way we're regulated, we have to have a base of a financial institution....we do actually have to have a generic model that we can use across all the bank, the retail network. So I guess we'll never actually use a different model for Internet options, however, I think if you have to look at the model it is really generic in terms of - (showing paper). This is the financial input sheet that we use and it's basically just straight income - I'll start at the top. We've got development costs here, which are just the broad financial categories and then we've got net interest income, which for us is our main driver because we're a bank - then we've got other income. Most of the Internet projects would actually just fall into that one line under operating income, so what we do have is, we've got sort of larger models that we use behind that, that make up... you know... if we were doing a project that involved using a transaction fee it would be providing a service for a transaction fee..... for example; we would have a larger model that would sort of map, in a sense... just all the stuff I said before about it in looking at attitudes and that sort of thing and then again we would just do a bit of sensitivity analysis and use the best assumptions that we thought were the most realistic assumptions behind it.



33. So we would use that behind and that just put it into that format for the purposes of passing through the Group - but it's the drivers that are behind what numbers that would be input into there that would be tested as such and see if we have the best option. That can be in any format as long as it's understandable, so I guess at that point it would be our specific Finance people that work in Internet and E-Commerce for Internet projects and they produce generic models as well, I think for use by peers, but they're certainly a lot more detailed, but I don't know about ROV and things like that... That would be done by them when we're preparing the model as opposed to when we would come in and look at it and evaluate it financially. So we are restricted because of the fact that we are a financial institution.
34. **GS - So it's a case of - the use of a template is actually uniformed financially reported in a sense rather than anything else? ...financial information communication rather than...**
35. ML - Yeah, as opposed to actually driving. These are used to make the decision making process, but behind that - behind the scenes - there would also be the different number of tests we do on other models that are to be valued. There's a lot of work goes into before this - this is the end result as opposed to actually what drives the numbers... We also produce the type of business case to go with it (show paper). Looking at all the options, identifying risks... risk is definitely for us big; we've got to manage our risks - risks is a big issue for us, bad debts and things like that, and then with it we need increased support on the Net, if people are going to take on this... That is a *major* issue for us... A lot of our time will be spent on provisions for abroad - internet security is a major issue for us and we would be looking at that before we progressed with a project, is there going to be an issue of security for us and we've got a whole formal process as well that a project would have to go through... you know, if it did impact other areas, it would have to go through the rest of the hierarchy of the business as well; it's as well very bureaucratic... banks are {laugh}... so there's a whole different process for that. This is where you've got the option to build your case on whether or not it's strategically viable or whether the financials are right - it can be as large as small as you like {laugh}
36. **GS - I guess it's usually larger rather than smaller, especially in Internet projects. Regarding the identification of costs and benefits, there are, especially now, lots of what we call *intangible benefits*. Some of the things that I've written in my email like rationalisation of systems, increased transaction volumes in branches which may...**
37. ML - We do have a lot of things. We have projects where there are for example, infrastructure projects where it's solely concentrating on cost savings - you might be looking at - for example, we've got quite a lot of sophisticated systems in our call centres that can time calls - for each specific call, how long it would take, we could be looking at automating some of those processes and things like that - how much it would reduce call time therefore we would have reduced staff to costs, things like that. We would look at those kind of cost savings as well. For Internet based projects like online banking - we've got reduced branch staff, a lot of our account servicing can be done online, so that we've got reduced overheads there - a lot of it is reduced manual operations, a lot of it is head count based.
38. But in many projects you could be doing account-based extra bandwidth systems. In the UK some people like the traditional thought of going into their branch and having a personalised service, but certainly there has been some people using the service as a result of online banking. It seems to be it's a perception of who's got the best Internet system - it's a distinctive customer that would use the internet, someone with a bit savvy who's going to look for the best service - it is usual for the best service- to capture that particular market - so it's more about that than

actual cost savings and obviously you're always looking at best practices and things like that... it's more about customer retention and market capture as it is about cost savings. You've also got intangible benefits like intellectual property rights - we would look at them again in a sort of terminal value and whether or not - if you say five years down the line this product didn't take off, could we use that technology elsewhere and there have been instances where we've developed something and we've used it for something completely different - the functionality has been there so we thought, what can we do with this now. Intellectual property rights is a difficult one - we did try to ascertain how to do more.... and all the stuff that's been happening in the markets and things like that - all these intangibles have drastically reduced in value - they do still have value intangibly - so we take them into consideration as well.

39. **GS - So is this value of intangibles - how is this communicated? How does that take part in a decision?**
40. **ML -** There is a section for intangibles - in this paper here... any additional benefits - I would expect to put tangibles and intangibles in there. I guess it's defining the actual value of the intangible benefits is the most difficult. What we tend to do, it's just basically based on future expectations and forecasts and for cost saving things, it's using existing costs and we expect to make X% - it's an estimate, it's whether or not you think that's a reasonable estimate - it's the business unit's job to come up with the estimates, valuations and things like that and it's mine and our department's job - we're doing an independent review of it to see whether or not we think it's reasonable from a financial perspective - so that's mostly what our job is. Sometimes we have actually relied on external valuations and calling in the experts, particularly associated with Internet products, certainly... A lot of the time it's expected market values we use, if there's been a study in the market... some of them haven't been quite as we would have expected but a lot of it is done externally and a lot of it is just forecasting and estimates and we're getting a few heads round the table and say, 'is this the best estimate?' and 'do we think this is likely to change?' - do a bit of sensitivity [analysis] around it and see how a change is going to affect it so we can come up with a best/worst case scenario and take it from there.
41. **GS - Is there a case for - I guess you've heard of that - knowledge accounting? - different accounting for knowledge assets and so on. Do you separate first of all the Internet projects as a source of knowledge as such, and if you do, what is the way of reporting for them? ...that is, if you do.**
42. **ML -** I don't think so; Well basically, we just report our intangibles in the balance sheet and that's how we'd report them. We're really restricted again on how we report things because we are a financial institution and all the sort of compliance issues in this. We don't have a lot of scope. ...and basically ... just we do actually have to enter intangible assets in the balance sheet and basically just doing to P&L reviews and things like that.... and that's where we tend to use the sort of third party people.
43. **GS - Is there an internal process that relates to the valuation of knowledge assets? Is it just for the sake of reporting to the FSA and..... you know, disclosing your financials and so on...**
44. **ML -** Not for that particular bit... For disclosure purposes we have to prepare them on an annual basis - there's not internal process as such - there's no division or specific department or anything that's solely dedicated to that... intellectual property rights and intangibles.

45. **GS - Another thing - what they call in Finance and mainly in the academic literature, the value of uncertainty.... in the sense that all these IT projects and Internet projects in particular are highly uncertain and there was this contention about uncertainty not being treated as risk in a sense that there maybe positive uncertainty as well as negative uncertainty in a sense that you maybe losing an opportunity out there which is uncertain on the one hand but if you don't do it you may lose it... and this was the main rationale in using things like the Real Options Valuation and so. Is that something that you're looking at, this way of thinking?**
46. **ML -** I think it was something that we used to do. I know some companies do actually provide, maybe by reducing there sort of net asset values - I know for instance there's one - I think FRS6 in the UK GAAP - you can actually reduce your net shareholder value because of uncertainties - and if it is an Internet company or a specific company risk associated with an uncertain product, you use that, but certainly it's nothing we would use... because that is a very small make up of our Group, and the main focus of our Group is to try to measure... we don't have... don't tend to use that... provisionally I mean we would evaluate that in that manner the uncertainties... but what we would do is we would build it into our forecasts for the sort of intangibles. So we would do it that way as opposed to actually accounting for uncertainty.
47. **GS - There's one thing I want to discuss relating to behavioural aspects of using the different methods of investment appraisal. There is a contention actually that the traditional financial methods being used, have a gearing towards the short term benefits rather than the long term, which is something that is actually... well, measuring the short term benefits - it's beneficial to the manager who is responsible for the project..... because he or she is not much interested in what's going to happen 10 years down the line, so in that sense using methods that award a central role to the short term benefits is good for them. Do you see that as a realistic assumption?**
48. **ML -** I can see how it *can* be, I wouldn't say it's an assumption that we would use particularly in terms of short term benefits. That's because in our E-Commerce and Internet division is solely for innovative use - in terms of that, as a division, we wouldn't personally look at that but I can certainly see how people are looking for the quick pay option. I think it goes back to what I was saying earlier how people tend to shy away now from actually developing their technology themselves and tends to go the expert and get a third party to do it and that way you can then just get the quick pay back. It tends to be the larger companies that do have the money to invest in these things that don't and do take a longer term view, but then they've got the capital behind them. I can see certainly a shift towards the sort of people looking for a short term view of they don't want to invest heavily themselves but are quick willing to use the license and the technology from an expert company, so I do see a shift in that. Again from a financial point of view, certainly the quicker you can get your benefits the better - I would say traditionally, from a traditional project appraisal point of view, that would be the way we would look at it, but taking into account the fact that we're talking specifically about Internet and IT based projects, you have to take a different view with them, you have to invest to actually get the return and sometimes you're looking at a 10 year period and you have to take that into consideration. I think you can see from our model, we do traditionally just five years but if a project is strategically important, we will have to look at it over a longer term, if it is strategically important. And it's something that they want to account too, that they will get a return down the line.
49. **GS - How is your time.**
50. **ML -** I think I have another five minutes.



51. **GS - One last issue relating to expertise. Because of the prevalence of IT in the 90s, especially in the area of financial services, there has been this new type of expert groups, the IT experts that's becoming apparent more and more in financial institutions during these years. Relating to Internet projects, what would you say as a factor of critical success., what would you say is more important - is it the IT expertise, is it the traditional banking expertise like your expertise, or is it some kind of a different expertise?.... what is a critical success factor of an Internet project?**
52. ML - That's a difficult one. IT as a critical factor... what's the best way to do it most efficiently and that sort of thing; then you've got to look at it from the financial perspective and say is it something that we want to become involved with - how will that derive income for us, how will that help us to achieve our strategic aims and goals? So, I guess if I had to choose one it would be IT, but I guess they all bring something to the table. A lot of successful products is how they're initially launched and how they're marketed. Certainly if you look at the Internet specifically, there's only a few of the larger brands that we know in the UK that are associated with the Internet... I'm talking about Tesco or Virgin or something like that, really huge brands and if you look at brands particularly associated with the Internet ..., and that sort of thing, they're not traditionally UK companies although there are some of them based in the UK.
53. Certainly it's how they are marketed - I think if you put banner ads on the Internet and things like that but that's not going drive your business on the internet... you want to bring some new users into it as well, so marketing is really important and using all channels. I would definitely say all three are important, but IT is certainly the cracks of it, and how you're going to get it right, on time, and what the best way of doing it is. ...and a lot of these are, I think this year... and there was a... I mean, they were financial options - financially viable options, to get a more mature product in a market like that; it's certainly working out better for them, to invest heavily over a long term period as opposed to aiming for some short payback. There's pros and cons of that as well because if you look at... if you want to get a mature product on the market, something like IBM who have the best product, and the organisation is so big that they couldn't actually develop the product in line with the market and you know what the market's like for Internet products, it's got to be a dynamic set up that can change along with everything else. Again that's where IT comes in.
54. **GS - I just wanted to ask you a few things. First of all, do you feel that there are any areas regarding investment appraisal, decision making and so on that I should be looking at, and which I'm not?**
55. ML - You've certainly covered everything that I would have expected you to cover. For sure, the Real Options area - that's definitely where it's all happening in terms of investment appraisal for IT and Internet have brought out, so I'm certain I would go down that avenue. It's got something I would say that's the most values that we have. If you've got all the theory behind the traditional methods then you should be alright... I guess then what you've got to look at is what sort of weight that you've built in, in terms of interest, hedging and all the sort of traditional financial aspects, but I think you've more or less covered everything. If I think of something I'll let you know. And certainly what I'll do is I'll get back to you regarding the issues about the FSA and financial products...
56. **GS - Any other documentation that you would be able disclose and that is relevant would be great. The last thing is - you mentioned something about people dealing with investment appraisal - are there any contacts that you would recommend, or shall I go back to AH?**



57. ML - I think Andy's going to be your best point of contact - I would either deal with him or the Finance Director in Internet E-Commerce. The trouble is as well, there have been a lot of third party people that we have brought in. There was one guy, NJ who works in Internet E-Commerce and he certainly was involved heavily in a business profile we were working on recently and I think he's worked for HSBC and other banks as well on Internet products; I think he would be a good contact. He's certainly more focused on the Internet side of things than I am. I have a more general approach, but he is
58. **GS - Have you got his details.**
59. ML - I can send you them - I'll email you his telephone number and his email address as well. I think he's certainly more up on what's happening. He's been involved in building certain models and he'd be more relevant to the Real Options and things like that.
60. **GS - Thank you very much.**

## 1.7. Telephone interview, 15/11/2002

1. NJ - ...obviously the views that I am going to give you will be different from the ones that you would get from the bank.
2. **GS – This is absolutely great, because this is partly what I am looking for rather than specific points of view of the formal organisation. So, first of all, how are you for time?**
3. NJ – Well, we'll get on for about an hour and we'll see.
4. **GS – OK. What I'd like to do is to start by telling you very briefly a few things about myself and then you can say a few things about your background; partly, you already did in our last phone call. Then we'll kick off the discussion about decision-making regarding Internet banking projects and so on. So, I am originally an Electronic Engineer. I specialised in telecommunications and I worked for a couple of years in a company as networks administrator in Greece. I did my MBA in Edinburgh University in 1996-97. For the last 3 years I am researching Internet banking doing this PhD, and I am actually focusing on that area because I am particularly fascinated by the way that technology has been shaping banking through the 1990. So, that's where I come from. Would you like to tell me a few things about yourself?**
5. NJ – My background was originally as a business analyst and systems programmer way back in the early 80s. During the 80s I changed and qualified as a management accountant, specifically in the financial services type of businesses so I understand a lot of the controls of the retail banking type of environment. And around 1992-94 I specifically got involved with electronic cash, the Mondex Smartcard project, and more recently I got involved in the RBS FastPay implementation, which is a virtual electronic cash product. And that's me in a nutshell. I have a background in risk management systems and finance. One of the things which I wanted to provide you with is, I don't know if you have a real understanding of financial institutions and the impact of capital ratios on decision-making. I'm probably going one step back, but it's very important to understand; and this is something that comes from my particular sort of career development, where I started within small business units, putting together strategic plans and annual budgets; then I moved into a Group function, which was looking at business cases, to then go back into the business; and ultimately looking at the forecasting and management of... in this case it was Legal and HSBC capital ratios. And you get a totally different perspective on the business. What happens is that the bank makes its money through taking-in customer deposits and those represent liabilities on the balance sheet, which are, by and large, interest- bearing. On the other side of the balance sheet, all that money that's being deposited with the bank is then lent at risk and at a margin. And under banking legislation, all financial institutions are regulated and have to maintain a level of reserves to support the amount of lending they do. And these capital reserves in fact provide risk capital, protecting depositors. Now, what happens is that, when you go through, let's say, a general budget cycle where you're putting forward – at a business level or department level – all your capital expenditure plans for one year, while those are consolidated, the funding of those projects would effectively deplete the available reserves, which would otherwise go to support lending activity. So, at one level – and this is down at the departmental division - what you're doing is that you put forward all your wish-list projects and that sort of thing, and what you have coming down from above is the aggregation of the Group-wide picture in terms of business expansion, which has to be afforded by increased capital, and the drain on that capital reserve, insofar as investment is concerned. And so our appointment as

shall we say, as a second round of budget analysis comes top down, and you start putting questions on where the business or the investment activity has to be curtailed to maintain capital ratios. Another feature that will have a bearing on this will be the cost of acquiring funds to finance the financial institution; so the capital I'm talking about will be a mixture of own reserves and maybe loan capital where you've gone into the market. And when you go out to the market and there is term debt, this is something that the bank in a number of years will have to repay to the bond holders; what happens is that you have this amortisation where you can't include much of that capital as part of your base; you have to keep it going out into the market, borrowing more and more reserves. And that in itself is a cost of business there. So, when you look at anyone of these Internet projects, or any IT thing, there is an overall constraint whether you're going to just continue growing your business, which is constrained, or to what extent you're constraining that further by investing in infrastructure-type of projects. And I think it is very important to understand that as the absolute roles for financing; and I think the danger is – I don't know who you've been speaking to – that people can just speak within their own area of 'I analyse investment appraisals' or 'I do DCF analysis' and that sort of thing; but just to understand that overall core constraint is very useful. The other thing, which I would offer up, is a suggestion in what you do, is drawing the distinction between transaction activity, which is between the customer and the bank – and an example of this would be something like going into online banking {as a} different delivery channel. So, in essence, what you're actually doing is say 'we're using technology to change the way in which we deliver to our customer', and the sorts of things there will impact the benefits from the service provided, the convenience, maybe impact on our branch network and the like. So, that is one key business area which has a totally different set of drivers as to shall we now look at the second aspect, which is whether there is customer to customer, customer to merchant type of activity, which a bank may wish to facilitate. And typically, one can look at this in terms of card products; debit cards, credit cards: they are issued by banks, they have interest income from it, but essentially what you're providing is the mechanism by which consumers link with merchants. There is a whole different set of rules pertaining to electronic commerce, as opposed to the traditional banking services between the consumer and the bank. And I think that in any strategy that a bank would look at, there will be that distinction; I don't know if this is something that you grasped in discussing with other people.

6. **GS – Actually it's the first time that someone is providing this distinction to me, but it's definitely something that I'm tapping into in my research proposal.**
7. NJ – I will explain why I think this is really important. When you look at the second model, and we almost can see it as a triangle where you've got the bank in the middle, or at the apex, the consumer, the merchant and the bank, versus the other one which is just a customer-to-bank model, if you are in that triangular sort of arrangement, the infrastructure and the technology is more akin to providing a capability that could serve other financial institutions in a white-labelled<sup>1</sup> environment or purely as a technology. This is where you'll find emerging or failed dot com businesses were technology providers operating or providing capabilities which were separate from a bank's historic legacy systems. Does that make sense? If you contrast that with the other model, which is one where 'we normally have a branch network and we have cheques and we have these other types of things, we are a telephone bank and now we're going to go on the Internet', what you'll see is that the driver is really capitalising on, or substituting existing bank infrastructure, which is largely bespoke to the financial institution. And what you would find is that the decision-making between what is generically Internet or e-commerce is one of the things to become that much clearer.

8. **GS – You mentioned something very interesting at the beginning of this conversation regarding the financial capital ratios and so on, that you get different perspectives and different results across different organisations. Could you bring some examples or make this a bit clearer? Because once we talk about capital adequacy, it is actually a regulatory issue regarding all UK financial institutions; however what you have found is, you said, that you get all different kinds of results from the overall capital budgeting procedure.**
9. NJ – Right, so, if we go back, the way banks are regulated are at two levels: One as individual legal entities; within that we will have things like Natwest plc, we'll have RBS plc and a host of other Group companies. Each one of those legal entities will be required to maintain capital ratios at a level. And what they'll have to do when the FSA apply a target level, a threshold, which is a few points above the statutory minimum; and depending on the stability or the robustness of the respective institutions, they will set levels which will not be a level playing field for all banks. So, you'll have sort of A Graded bank, B Graded bank and all the like. Within a Group, and that is the RBS Group, also, when they consolidate the financial position of all of the trading entities, they must also maintain a Group ratio. So what you have is that all ratios are operating at those levels. Typically, business units will actually span across legal entities. Now, what you would have when you structure a bank, you will typically have those activities which are infrastructural providers, the computer centres and the utilities, and then what you will have are all the businesses that will hang off the front of that. Now, these business units will be picking up and applied across from the utilities, but in terms of trying to grow their business, what will happen is that they will have to justify the income on the CBA for whatever they wish to do, and they will be allocated costs from Group resources. If you were wishing then to invest in something that is of a... it can either be a sort of aligned to a particular business activity, in which case the income that's generated will support that the investment is clearly identified. If you then have an investment, which actually kind of spans across a number of businesses, clearly, the justification of it becomes *that* much harder, because businesses will take advantage of that utility function at different times. And therefore that decision becomes one of gut feel, one of strategic positioning, rather than one of justifying on, say, financial income generation.
10. **GS – Yes, I see what you mean. I guess that in most instances it is getting political as well.**
11. NJ – Yes. Now, the way the ratios come into effect, if I go back to the days of Midland bank who invested in a merger with a company called Croco Bank, they couldn't grab hold of Croco Bank, a telephone bank; as a result of the acquisition they ran up losses and what happened was that Midland incurred bad debts of let's say a billion GBP. Because that is a deduction from their reserves, it actually has a profound long-term impact on the bank's ability to invest in infrastructure. Because what they're actually doing is struggling to maintain the level of this activity they have at that particular time. So it's really when you've got unforeseen, so for example, maybe with the traps in the share market, as at present, that has probably changed the cost of financing and the ability of banks to raise capital that would then have an immediate effect on discretion of projects. And where this raising of capital comes, is that when banks are financing their capital reserves through debt capital, which is term-dated – and term-dated means that each week is payable to the lender – what will happen is that they will have to go into the market to raise more funds, to maintain the amount of capital in the business. So, it's these sorts of things, which are important. Now, if we go back to the models that I was talking about between the e-commerce customer to merchant, customer to customer type of thing, what you have is that technology investments, which are ideally suited for, maybe, spawning within as a venture within a bank, which will



then be sold-off or other people invest in them as core technologies; or it may be that such infrastructure is actually developed in collaboration with third parties. And you will see at places something like Mondex, and this is a Smartcard project developed by Natwest around 1990 as a concept, by 1993-94-95 they trailed the Swindon project and they commenced a global discussion and did a joint venture with Midland to prove the concept, and then in 1997, having proved the concept globally, they got commitments from a number of foreign countries, America, France, South Africa, Australia and others, and what happened is that they floated-off this thing called Mondex International as a standalone venture promoting the technology and the Smartcard scheme. So that's where decisions that one might take is to what extent are you looking to get a capital appreciation over that investment, as opposed to what direct benefits will it make to the bank's existing customer base; it's a venture investment. That will be totally different from one where we're wishing to put in a new delivery channel, to provide the distant services to customers so that they can actually do things from the comfort of their living room.

12. **GS – Right, I see. Bearing that in mind, however, it is the case that in each of these models that you've referred to, I guess the bank would like to know the costs and benefits and whether they will be direct or indirect to its capital. And therefore there should be some sort of investment appraisal process regardless.**
13. NJ – Yes, you're right, but where I'm heading is that from my 20 years of experience in financial analysis, business cases and the like, is that more often than not business managers who are closely connected with the project, usually understand the intangible kind of benefits but the ultimate decision in large organisations comes down to the power and the background and the desires of maybe one or two individuals right at the top of the organisation, quite independently of, maybe, the financing. In a situation, for example, if somebody at the top of the organisation has a more strategic outlook on the world, they will be more inclined to accept longer term returns, they will properly operate in relation to what is the maximum downside financial risk; one of the ways of writing-off the whole investment. In complete contrast, if you've got a CEO who is targeted on income generation, even if you were to articulate all of the intangible benefits, that shouldn't demonstrate that the financial(s) is going to make a return, you are not going to get off the base. And the difficulty that you have at the moment is that following the collapse of the dot com market, is that anybody who puts together something pertaining to an e-commerce and Internet type of project that are income generating, people will say 'well, I just don't believe it'. It's a reverse effect. And that is quite powered at this point in time. And therefore you actually say 'to what extent is the investment affordable?'
14. **GS – What you've just said is interesting, and it's a result that I am getting as well regarding the power relations in the organisation and the overall decision-making process, that it comes down to power rather than positive NPVs or whatever other measure. As you have been for so long in the banking industry, how have you seen that changing?**
15. NJ – I haven't seen it change. And what I also would maintain is that, by and large, financial departments analysing projects have very little, shall I say, clout in the decision-making process. What they're actually doing is providing an independent take on the assumptions and the sorts of understanding that the business has around this project. If I can explain, I can put together a business case on the basis 'here is one line of projected income and one line set of costs'. If I was to present that to you, would you have any confusion as to that this is actually going to generate the desired outcome? The answer is No. As soon as you start getting down to itemising costs and income, what you're actually doing is demonstrating

that you actually understand what it takes to deliver the product or the service or the investment, and that in itself is part of the learning process. And then what you have is a Finance function that is actually validating that that there is a process in place. The only area where the financial analysis as a central process has been known to be vulnerable is where you have IT investments – and this is going back to the mid-late 80's, where many business units had their own IT infrastructure; this is before what currently happens where everything is increasingly centralised, operating over common applications. But in that environment you get a lot of dispersed and bespoke IT, that the central consolidation of projects and their evaluation can actually identify where they are overlapped, or there is duplication where synergies have not been identified.

16. **GS – So, what about improvement of the communication between the different bits?**
17. NJ – Where you have a group that has lots of self-determining entities, it's that each one of them will see the world very much in their own sphere, and if they have their own IT resources, there will actually be pressures about those resources and related development. Therefore taking a group view of maybe an initiative in one division and then applying a wider application or does it cross some other technology? That is an area where central project review pays dividend. And indeed, at that time, when I was in Midland when this was happening, they brought an IT guy on the main Board to assume functional responsibility for Group-wide investments. So, I'm not being dismissive of the role of Group Finance in analysing projects, and what you actually find coming out of the financial analysis is that you can get a sense of dynamics about the key drivers and the sensitivities to risk.
18. **GS – Right; because one of my main research questions is about the financial analysis in terms of quantification, one of the questions there is that the banks or any financial institution that is embarking into such projects – and this holds for all IT projects – do they try just neglect numerically, let's say, arithmetically, the intangible costs and benefits, or is it something that (because of what you've just explained, the whole mechanism) they believe is not worthwhile doing in terms of pulling more resource into analysing everything?**
19. NJ – I would answer that by saying that at the CEO level, there is a general reluctance to accept any quantification of intangibles, because intangible benefits are rarely realised. And therefore, a project that is depending on intangibles in relation to whether it will get a Yes or No decision, the project itself is a marginal project by definition. So what you'll find when people put up their business cases, is that they will declare or state what the intangible benefits *could* be, but they will not attempt to quantify them because this is the start to.... also if you try to justify on these marginals... And this is where the general gut feeling of the real decision-makers at the top is the critical as to what value do they place on the intangible benefits; and this is where you will get some corporations that will come out winning on the strength of the risk that some CEOs have taken and others are loosing.
20. **GS – I see. Speaking of the decision-making at the Board level and so on, you have projects – and this is very typical of IT projects – that you can say the potential benefits are (1) long term, and (2) the numbers in terms of the DCF or whatever method the Finance team may be applying is not very convincing in terms of giving a negative NPV – which is again typical of IT projects.**

21. NJ – If we go back to the model that I have sort of promoted, which is the one of saying ‘is this an existing customer service which we’re going to modify?’ those are projects where largely they’re going to have either negative NPV or they’re going to be justified on service quality. And they are areas where in fact you can find some of the heaviest spend. Now, if you go into the other world, of providing transactions between individuals, customers and merchants, what you’ll have there is the potential attrition from existing paying mechanisms – typically credit or debit cards. So, what you’ll find is that within organisations there will be the internal politics that prevail between those who are promoting the new technology and that technologies are the cheap way of doing business and facilitating payments versus a cash cow, an existing product line for which people are on bonus targets. So, that’s clearly an aspect that has to be recognised.
22. **GS – Yes; I perfectly understand that. We’ve just spoken of interest actually; group interests, personal interests and so on. One of the areas that I am looking into is that of expertise in the banking environment and how this expertise and balance of power, if you like, is being shaped by new technologies. For example, the prevalence of IT – and this is something that I would like to check back with you, since you’re for so long in the FS industry – in the 90s has actually given rise to a new kind of expertise, the IT expertise in banking, and therefore people who have the banking background but also have the IT background so that they can understand both sides. Would you say that there is a prevalence of some new expertise or any change in the balance of power between expert groups, since the Internet revolution?**
23. NJ – Although what I am experiencing and identifying is that there is a disconnect between the youth – who are obviously coming up in a different technological age than business owners – and the business owners; so one can argue... if we look for example at a company called PayPal. The speed with which they have been able to develop market share from what is essentially a technology company is quite marked from the pace at which a large financial institution would. Because any Internet-type business is actually non-core business. And that in maybe promoting a way in which youngsters might use technology or where the technology is going, it’s actually very hard to get vision across to maybe the bankers; so, what you have is the threat from non-financial institutions gaining technology and then coming into financial purposes. And so one of the threats to banking will be telcos, Vodafone, BT and all of those players, because they are essentially technology-driven firms that generate income from transactions and they can actually facilitate payments and enter into the financial world; they’ve also already got customer bases that are as big, if not bigger, than individual banks.
24. So what you have is, whilst telcos are saddled with the generation of licensing at this junction, they can only work alongside existing banks. But you can actually say that although they’re short of resources and they fit between technology payments and their existing customer bases, that they can actually start delivering financial services independent of a branch network. So, what you have here, and if I talk about MasterCard as an example, they may acquire technology companies just to curtail existing claimants; they’ve acquired Mondex, they’ve acquired another company called ThirdPay recently, whether or not these technologies (the one was on e-mail payments, the other in e-cash) would ever go ahead is a mute point. But what you have is a payment scheme and they’re acquiring control of these capabilities and they’d either roll them out when they have to, to counteract the threat, but until such time they’ll say that their core business is making money on credit and debit card transactions. And I think that banks are very much at this juncture protecting their existing business by trying to close out competitor technologies.
25. **GS – Right. So, effectively, to get back to where we started from, regarding the expertise, what you’re saying is that you can see actually a new cast, if**



**you like, of people coming into FIs with excellent technology knowledge as being a new power source.**

26. NJ – But I think it is not somehow technology in itself; it is an empathy with youth markets and where the sort of services and the direction that businesses need to take in order to secure long term growth. So, in terms of where we come from, it is the rapid rate of change in the last 5 years of the Internet, which hasn't delivered the dreams about 'this is what will revolutionise the whole way in which people do business'; this hasn't happened. People are still going to shopping malls; they don't necessarily wish to do Internet shopping, but there is a culture there, in view of how the market could use mobile phones. And who knows what the next generation devices are going to bring? And so, it is that sort of alignment between understanding the customer and the technologies, which is where the real winners are going to come from.
27. **GS – Right. Let me just go back to what you said about decision-making, which is very very interesting in terms of that you're actually the first person I am speaking who is dipping into that power relation issue, which is actually very real. Regarding the decision-making, would you say that there is a specific pattern of decision-making regarding IT, as opposed to other types of capital investment? In which sense is IT-specific decision-making different intuitively from decision-making for other infrastructure?**
28. NJ – Actually, there are three types of decisions; one which is IT, one which is property-related and the other one will be acquisitions. And acquisitions will be connected with growing your business, so acquiring another invoice factoring business or expanding into another territory. So in relative terms, and this pretty much applies to things like staff reduction and those sort of measures, those are the three distinct areas of investment. If one looks at IT, the decisions that commonly are taken are standardisation of applications, hardware and that sort of thing, there's clearly a need for that and there's the question of obsolescence and therefore there are actually decisions which are of the type 'this is not to generate returns on the shorter time span'; there are also decisions taken not to upgrade systems, because clearly, all system developers and software companies will bring out a new release.
29. The toss of migrating systems is such that, you know, 'what benefit does the upgrade give?' So, for example, we'll be working on workstations or NT or I don't know what, following the merger between Natwest and the RBS, some of our office applications have gone back; so you say 'is there a step forward or isn't there?' Because the cost of upgrade across a whole organisation is an expensive business. If you look at property, because you'll be saddled with long leases and that sort of thing, and generally the investment will be around centralising processes and operations, or collocating operations to get synergy, moving out of extensive service centres and the like, decisions are ones about efficiency and reducing your cost base. When it comes to acquisitions, it is really 'are you getting the right price for the business?' And I think that acquisitions are an area where intangible benefits are probably more relevant.
30. **GS – Right.**
31. NJ – Something which I haven't mentioned, is a thing which is really strong within FIs as part of financial control and project sign-off, are the authority levels that are delegated down the hierarchy, and therefore, depending on your financial analysis and so on, who can actually sign-off a project. That is actually of fundamental importance to the long-term protection of the bank, so far as committing expenditure and the risks that your projects are generating. So, you get things where you get definitions, well, whether it's just the project's initial Phase One and that's it, or to what extent are you looking at a 'Beta' project. And what you just do



is get approval in principle but only sanction for the first element of spend. And what you have is through the control book manual, a departmental exercise, as a group puts a check on the business not running away with itself.

32. **GS – Actually that brings me to an issue in terms of responsibility and accountability on the project, do the financials from it have more relevance there?**
33. NJ – They do. What is a process that is commonly adopted, which is PIR; I have been subject to one of those personally and they can be very very rigorous. On one of them, I was involved in a project where we were changing infrastructure and we were centralising cheque processing. And in this instance, what we actually found was that the project had generated benefits, but not in a way that we'd expected. And you can only look at that after the event. It provided us with an opportunity to dispense with old technology by moving processing out of our branch network.
34. **GS – In terms of PIRs, are there any reviews or appraisals throughout the implementation process? Like different milestones, and how are these used or acted upon?**
35. NJ – What will happen is that most of the controls are ones of internal audit and just general project controls. Where Finance come in, is to the extent that you've generated a business case. One of the first things that one has to implement, and it would normally be subject to audit before you start, is that monitoring process, or that control process, that will allow certain milestones to be monitored, be them financial, be them just in terms of milestone dates. So, when we actually complete a return up to which we have to describe how the benefits are going to be realised, - in the project I'm working on this is in terms of customer numbers, transaction numbers and the like, and different business streams that are going to contribute to our overall performance. At this point in time, we have not been validated on that, but at some point we will be. The real crux of business case analysis is the detail. And what I'm actually experiencing in this e-commerce and Internet field, is that because of the lack of money outside the business – and we are now in the space of customer-to-merchant, customer-to-customer – where you might wish to do joint ventures or deals with other parties to help develop the product, because everybody is strapped for cash, there is one proposition on the table this week and either it's a high-goer in the space of a month, or it goes completely cold.
36. And therefore, what you're actually finding is that the business model upon which you have built your financials changes; and it changes around the customer behaviour. So, you've got models that are saying it will either going to be high transaction value but low volume, or they're going to be in the space which is going to be high volume and low value, and anywhere in between. And if you're actually developing a technology, which is a payments capability, or any other delivery type, then what you actually want to do is to determine whether you price on value or you price on volume. And the dynamics of that changes almost week by week, until you actually conclude your first deal. When you conclude your first deal, then you actually know that that anchors in a certain sort of behaviour that you can predict for, say, on or two years on. And we have gone from extremes of high value cross-border payments – and that involves paying amounts back to East European firms or firms in Bangladesh or wherever – to other extremes of, say, buying ring tones over mobile phones.
37. And that is going to be one of the challenges to actually build your business case up based on customer behavioural analysis which then underpins everything else in terms of your financial analysis and projections. And what I have experienced in this role and the previous one that I had, is that when you actually work from the customer analysis and build it from that level up, it is that much easier to justify your business case and secondly, what it does is that it drives out operational

volumes that actually tie-in with the technology and capacity planning. And the danger that I've seen is that when people start building business cases, they do it at a superficial level, based on expectations, without the desegregation into the different market characteristics.

38. **GS – Right. It was interesting to hear what you said that PIR that actually gave benefits in a different way than expected. Would you like to tell me a few more?**
39. NJ – If I understand what you've just said there, for example, if you can imagine a scenario where you are creating regional centres out of a branch network, what happens is that your delivery costs can sometimes go up in terms of transportation, if you're actually moving bits of paper – it's back-office processing at a branch network – you might find that what you get is cost savings across the whole network in terms of your front line staff cease to be operators, they become sellers. Now, in rationalising – and this was a cheque processing operations – into 14 centres, what happens is that those 14 centres give you a much more flexible cost base than what you had previously across an entire branch network, where you're talking purely in terms of resources and full-time equivalent (FTE) activities. So if your front line staff are doing an activity marginally, you cannot realise the benefit of cross-savings. Now, as soon as you start dragging, let's say, operations out to regional centres – large centres but regional ones – each one of those can then be subject to overnight closure. And you largely can realise benefits in a world where your volume projections can be uncertain. Just by changing the business model by which things are processed gives you a more flexible cost structure to be reactive to upswings and downturns in volumes. Now, that was the case in point where that as a business driver for one of the intangible benefits had not been identified. But over the 2 years of implementation the market conditions have fundamentally changed.
40. **GS – So was it the market conditions that made the difference?**
41. NJ – Yes, in terms of anticipated volumes, but because you've actually moved into a processing structure, which becomes more dynamic, you can actually then scale down your implementation accordingly. It's a flexibility issue, because the world is so uncertain; and I would argue that that would probably be one of the biggest intangible benefits to promote in any IT operations project.
42. **GS – Uncertainty in general is something on which there is a huge discussion on academic literature, especially on the definitions and the separation between risk and uncertainty, and there is a contention that usually institutions are looking at risk as the probability of earning less than expected rather than uncertainty, which can be both positive and negative; so, in that sense there is actually a case for neglecting, if you like, the positive sides of uncertainty, which actually takes me to the issue of the techniques used in investment appraisal.**
43. NJ – What we should accept is the general reluctance to accept new techniques. I, for example, developed a different financial control methodology using variance analysis, and whilst I was in control of a business and applied it, it generated significant results in understanding what the business would do in being reactive to it. The technique I applied, however, I could not get Group acceptance to it. And what you find is that there will be people who understand DCF analysis and standard Group process, but to change an organisation is really difficult, unless you've got somebody at the top who is a Finance person, and is willing to accept a different form of presentation. This resistance to change regarding analytical techniques is quite big.

44. **GS – From as far as I know, the Royal Bank at least, is one of the institutions that have actually started somehow – I don't know to what extent – adopting the Real Options Valuations and so on. This was something in my list of questions – ROV. Is the case the same with Real Options as the one you just described? It is a new method, if you like; something that is separate from DCF; it's more sophisticated, if you like, in terms of giving a positive value to different options.**
45. NJ – You must forgive me; I'm not OK with the description of ROV, but as I wrote again in the note; things like decision trees analysis, where you're actually looking at different options of 'yes' – 'no' and this sort of thing, putting probabilities in these to come up with a final outcome. Now, I don't know if Real Options is connected with that.
46. **GS – Well, it's kind of different...**
47. NJ – The fact is that in 20 years, I've not seen decision trees analysis used once! And yet, other techniques – that as a qualified management accountant are in the 'armour' that I have – and I appreciate how one uses them, but large organisations are bogged down with the methods they currently adopt. But I think there is a lot of mileage in evaluating options; and one of the things that the Royal Bank was doing, is that they're doing it in terms of high-medium-low type of projections on your business case to understand it. In terms of the options, the 'don't know' decisions and that sort of thing, they haven't pressed it that hard. And I think that this is something that is probably in the infancy. One of the difficulties that you have when you present options is how can you justify what you really want by saying 'well, I'm not buying a Rolls Royce, I'm buying a Mini', but you only need a bicycle. And still when one puts together options, there's a lot of effort that he'll have to go into to do it properly.
48. **GS – Something that I wanted to tap into is the fact that results of such methods can be themselves uncertain and not proved, and therefore it's not worth doing.**
49. NJ – Where obviously options, in terms of options valuation, are probably relevant is at the strategic level and on a 3-5 years time horizon. Because once a new thing gets in the course of action, you can't turn the tent around. And therefore, to have business' analysis teams working alongside strategy's teams working out what these options are is probably very fruitful in marketing them... But in the sort of business as usual world, and justifying what you're going to do next year and putting up a business case for the current project as it comes about, Options Valuation is probably not the name of the game. Does that make sense?
50. **GS – Yes, right; it makes perfect sense; it's real life actually {laugh}.**
51. NJ – This is what actually happens. I work on something for which we may have a deal this week; if it's on, I'm going to have to put a project together for that to justify it. If it doesn't come off then there's the next one. And because, at one level, we all operate like that, you can't really talk in terms of options. At a strategic level, options are actually critical, because it actually sets you out in the course that you can't turn around from and if you don't get it back, jobs roll, heads roll.
52. **GS – Just to remind you of the time and ask you if it would be alright if we go for a few minutes.**
53. NJ – Yes, a few minutes is OK.



54. **GS – Actually, speaking of the options at the strategic level and so on – speaking again of the identification of costs and benefits – is the identification and the measurement of costs and benefits separated as processes in the organisation? Or are they seen as a whole task? Identifying, putting down a list of costs and benefits, potential or expected, is one thing; attaching values to them or saying that this one is tangible and the other intangible and therefore it can be measured, and this is how it is measured and so on is another. Are these two different processes, or are they seen as one?**
55. NJ – I think they are one. Because in understanding the value of a project you can only look at it in the whole, and then as you start to identify components of benefit or cost, you can only then sort of start to evaluate whether it's tangible or real and then put value to it. I don't think you can really separate them. What you then do is, having got the collective picture of the project, you then determine how you best present it, and that will actually be dependent upon the decision-makers and the types of things that they would be expecting to see.
56. **GS – I don't want to abuse more of your time. {laugh}. Would it be possible at some point in the near future to have a follow-up discussion?**
57. NJ – Yes, of course.
58. **GS – As I said it was very interesting to see from you a perspective that I haven't had before in my interviews – and I've interviewed around 16 people by now, so I'm very interested on your take. The other thing that I'd like to ask you is, regarding the discussion that we had, is there any form of documentation that you could provide to me on the processes – of course I am talking about things that are not confidential.**
59. NJ – Well, the answer to that is No; what I said is from my own experience, and there is nothing that I can specifically lay my hands on.
60. **GS – Right, that's OK. The final one is, do you think, again from the discussion that we had and the documents that I have sent to you and so on, that there is something that I am not looking into and that I *should* look into? Some area or some perspective?**
61. NJ – As I opened this discussion, understanding these differences in business models between providing service to your existing customers in a different manner, versus the provision of payments capability between consumers and between consumers and merchants; and that is, I think, absolutely critical in trying to understand and to position the feedback that you get from individuals and where are they coming from. Because I would say that the decision-making processes have their own dynamics.
62. **GS – Yes. Finally, is there anyone else in your organisation that you would recommend I speak to? I spoke to AH, ML, and other people. Is there anyone you believe that it would be valuable for me to talk with?**
63. NJ – I have a difficulty answering that question; I am consulting here, so I don't know the network. Otherwise I could suggest someone, that's no problem {laugh}.
64. **GS – OK. That's perfectly honest {laugh}.**
65. NJ – What has happened is that on this particular project I am on, my contact is with ML to the receipt of my analysis. And that's why she directed you to me.



66. **GS – Alright. I will follow up with you. When I transcribe this conversation I will send a copy to you and you can feel free to have a look to see if I misunderstood any of your points. Sometime in the future I will ring you back to ask whether you can spare some time again to have a briefer, of course, conversation to discuss things like knowledge management and other issues.**
67. NJ – Yes, KM is something that I would like to speak about. It is an important area, but that will be another conversation.
68. **GS – Alright. Thanks very much for your time and everything. Bye.**
69. NJ – Bye.

## 1.8. Interview, 18/11/2002

1. IJ – Do you have a structured interview you wish to go through, or do you want me to tell you about my experience?
2. **GS – I have what we call a semi-structured interview where I have some areas to discuss rather than very specific questions. So I'd like to start from my background. I am originally an Electronic Engineer; I graduated in Greece. I worked there for about 3 years in telecommunications; then I did the MBA and then I started doing this PhD about Internet banking and specifically I am looking to the technology management side of things and issues on the identifications of costs and benefits there; so, if you like I am actually approaching it from both the financial side and the technology side. So, that's it more or less; if you would like to ask me anything please go ahead.**
3. IJ – No that's fine. I think we can probably spend a lot of time understanding the detail of your work; probably it's easier if we just carry on with the interview and see how it goes. Feel free to disregard this interview, because I just do retain a concern that I might not give you much value. OK, so I have worked for the Royal Bank for 24 years now, which is quite a lot of time. I started in branch work, then I've served for 3 years in the IT division, which wasn't called IT then; it was called Electronic Data Processing (EDP) where I was an operator on a mainframe, a computer for the bank. Then I went back into branch banking, into a couple of Head Office departments and in 1992 I started getting involved with the project Columbus, which was the major change programme that totally transformed the Royal Bank. As a result of my project work then, I specialised in projects, and when the bank was restructured a couple of years ago, I joined Retail Direct, same as Marion; Marion is in Retail Direct Finance, I am in Retail Direct Strategy and Planning. I am specifically working with what we call own-brand businesses, which can be branded businesses within the Royal Bank – such as Lombard or Direct Line Financial Services or Virgin; Virgin actually crosses over to the other type, which is with a partner; Virgin, TPF and many others which you'll probably never hear about and of course I can't give you the names, but preferably it would be of interest to you that over the last 3 years, I've been involved with two other major companies in developing electronic banking offerings with them, branded in the name of these companies. So hopefully that's going to be of some interest to you. I think my experiences in these two areas are the most relevant to the discussion; does that sound reasonable?
4. **GS – Yes absolutely.**
5. IJ – So let me tell you about them briefly. The first one was with a major UK company who wanted to break more into the Internet market, the e-market. So, we are talking here around the turn of 2000 when I started to become engaged with this major company. And they wanted to have a banking offering on the Internet, and they were happy for that banking offering to be branded. I'm not actually breaking any confidentiality. We did actually launch a website for business customers, a partnership with them which was called Work-24 with Scottish Power. Work-24 was a business offering and I was actually involved in a project at exactly the same time, which was a personal offering. So, that was very interesting: there was a small team from the bank went and collocated with a small team from the third party and with independent consultants, such as MacKinsey and PWC. We locked ourselves away in an office in Falkirk, because that was the only place available for us; then we moved to offices at the centre of Glasgow and were trying to develop this proposition. Subsequently the plans for the personal proposition were shelved, which resulted in the business proposition being taken down from the Internet some time after, as it would exist in the public domain. Now, that was a

- hugely interesting experience for me; it was a really great development. If you take yourself back to the end of 1999, the Internet was the place to be and getting banking on the Internet was the thing to do.
6. Everybody was really buzzing and really up for that aim, but there immediately started to be clashes of culture and, to my mind, misconceptions of what banking was about and I freely admit misconceptions from our part; perhaps we as bankers had expectations that were not realistic enough. So, a first key dimension I could see was that it was absolutely excellent that the two companies, the Royal Bank and the third party said "You guys get in a room and come up with something. You're empowered to do that. Here are some ideas; go and kick them around and come up with something." So that was a fantastic thing to do, and totally fit with the Internet ethos. But the fact was that it is really difficult to come up with something innovative in banking and put it on the Internet. And in hindsight, the innovation is all around the branding and how you sell it; not in the product and the functionality. That's my opinion anyway. So, we had the Marketing people from the third party trying to develop a weasel banking product. In hindsight you might say 'well the Royal Bank is huge; if there are weasel products then you guys are the guys who can put them out in two weeks, when for these guys it takes years to develop a new banking product potentially; it takes months at the end of the day but these guys are thinking about their job all the time. The recent revolution in banking was obviously the Virgin One account; in terms of pure product offering, Virgin One account was very revolutionary, really unique and really out there.
  7. They don't come that often. And Virgin One itself is a collection of other products under one umbrella. That aside, you get savings, loans, money transmission accounts, credit cards and then you go to some little specialist things. But you are not going to change the world! So, we spent a lot of time in that venture: "why don't we have this? Why don't we have a Virgin account on the Internet? Why don't we try this or that?" It was all very complicated. So, agreeing on a proposition was really difficult; so, again, one thing I think is relevant to your study is that it is great to give the free thinkers the space to free-think. But you need a vehicle to get moving, in my opinion: get on, get a product on the stocks that you think is going to be reasonably profitable and your venture will build on top of that. And that will be a train that starts slowly running. And even go as far as "right, we're going to form ourselves a joint venture here; we're going to develop this Internet proposition". When you start selling this brand and this product over the telephone, or over direct mail, or develop it in the Internet, - because probably the product itself is already beyond the bank's core system in some guise or another - If we just want to start selling a brand, then let's get some phone calls going, let's do some target mailing to start selling the product, build up a stream; so we strongly believed in that.
  8. Another factor of course was that, the longer that debate took to resolve, the Internet bubble was bursting. And that was important, because there was a sea change in people's attitude towards the Internet. So, the longer you go with clear ideas it's fine; when the Internet is still really up and running, then the pressure is on; 'come on, find an idea'. As soon as the bubble starts to burst then I think people's enthusiasm starts to wane. They're going to say "look guys, this isn't working; let's just stop; what we did, we did". So that was important. So, as a relevant comment that we did actually buy Natwest Bank at that time. There's big important pieces of work and there's BIG important pieces of work. And the attention sort of moves. So I think that by the attention moving from the work I was on, it actually gave the work I was on longer to come up with something, bizarrely. But because they couldn't, when somebody just looked back he said "Are you still doing it? Are you still trying to find an idea?" We lost the attention, which was good in terms of freedom but it wasn't good in terms of time; people, I think, would have come in earlier and try to sort it out.
  9. **GS – You said that as the bubble burst, people started being less enthusiastic. So, again there was some kind of pressure from different power**

**centres, if you like. Was there a specific area that was resisting, or was it just people around the group started feeling low about it?**

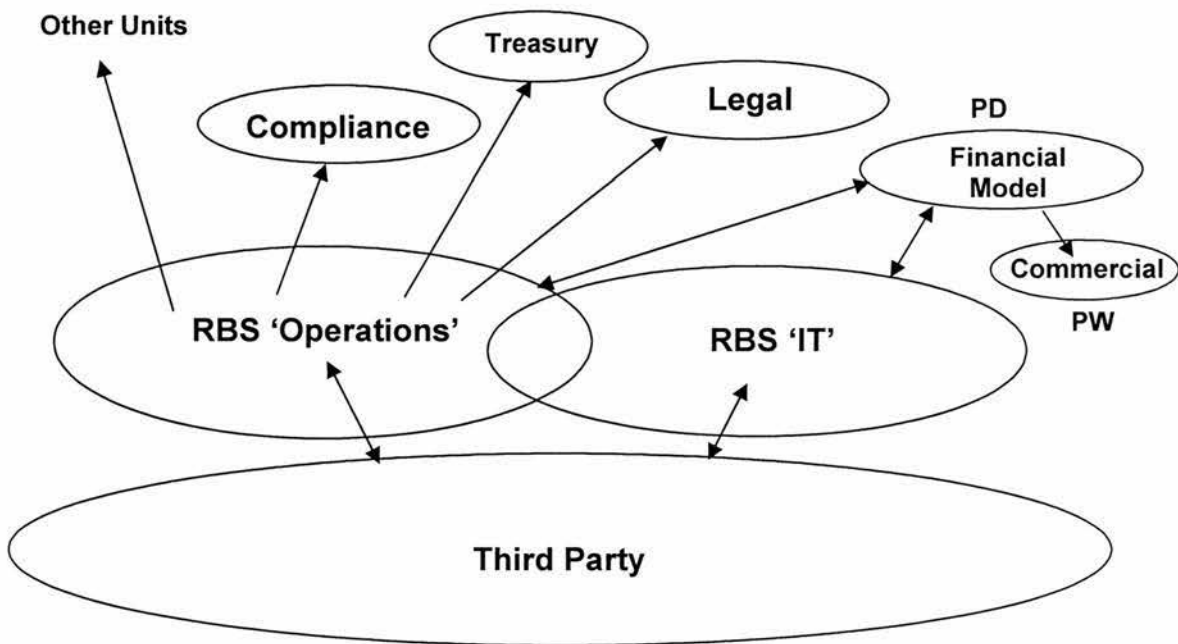
10. IJ – No; people like me in the project started to feel low about it and that was coupled from a feeling from the top that there was a burn rate on this. In terms of financials but also in terms of key people being out there, doing this, when they could have been doing something else. As I said there was a small team of us. How they actually formed a core team from the Royal Bank, Royal Bank core systems, including IT, a core team from the third party, and all these consultants as I said, now these consultants are pricey; and the burn rate if you involve people from MacKinsey and PWC is tremendous as you can imagine. And you can see it enough in your budget; it was several thousands of pounds a day and the Internet bubble was bursting! Is this really a priority just now? Should we stop it and save the expense? Perhaps, more important, release these core people back to help with other things. So I don't think there was no one who wanted to stop it; I think at the end of the day, everyone agreed with stopping that. It was a sort of retrench.
11. **GS – Speaking of setting up a team to develop specific Internet offering, including Internet banking with the third party, the Royal Bank has been having the highest IT expertise from Direct Line and so on. Was that expertise brought into that group?**
12. IJ – Yes. We didn't have people from the Direct Line offering but there was a number of project people brought in from the change programme; and the kind of model that we had in the change programme was that, although you may not be directly involved in, say, TPF, you know it's happening and your network is there. So there was a group of people who worked on TPF development, including myself; so, yes, we were drawing experience in the group and the business model we were operating on was that you go back to the cores of expertise and formally or informally second them to your project. So, the second project that I got in was probably more structured, which is an interesting point; I haven't thought of it before, but it was much more structured. Picking up on your point, this was another huge British company, running from January 2001 – although discussions had been going on before then – and they too wanted to put their banking products onto their Internet site to match with other products that they had.
13. I think the difference there was that there were concrete ideas; whether we thought these were good ideas or not is debatable. But they were concrete ideas and they were a company who the Royal Bank wanted to do business with for various reasons. And because they were also in the Finance sector, there was a much more structured approach than the previous company I was talking about, who weren't. I think also the Internet, one year down the line, made a huge difference, believe it or not. In 2000 the ethos was that we should all be on the Internet; it was the place to be; let's all be e-guys; let's all dress down and the like. I'm quite a relaxed person as to all this, but it was too exaggerated! I was more like 'let's do some business guys!' But that was an interesting clash. The second offering, was pulled back from that setting. It wasn't so gang-ho for the Internet. It was like "let's develop the electronic channel". And there is a subtle change there.
14. **GS – Yes I know; it is the change from 'that's the place to be' to 'let's see what we can get out of it'.**
15. IJ – Yes, exactly; it was a change in mindset; so the second project was more like that, which meant that people like me were the bank's main businessperson on the ground, a ring fence for the bank's business; every aspect of the bank's business engagement with third parties was going through me. But as to the commercials, I wasn't the leader or the specialist on the commercials; I was the leader for all the operational stuff. And I got involved to all the commercials because I was sent to



do the whole thing. But we had specific people building the Finance model etc. It might actually be a useful contact for you; [] It's PD.

16. **GS – Oh I have spoken to him, and it was a very interesting conversation.**

17. IJ – Excellent. PD worked for me in this last project. So we had PD over here doing the Financials {IJ draws a diagram}. He did the financial model, and a guy called PW was doing the commercial piece. And then there was another major piece around the legal side. So, we got the Royal Bank legal team involved as well. And there was RBS Operations and IT. We were the main players interfacing with this third party. So we were on the side most of the time. PD was closely involved from a financial model perspective, but areas like Legal and Compliance and other areas of the Royal Bank – too numerous to mention – we would draw in as we required them; that's the business model we operated on; and I was leading this team {IJ shows on the diagram}, so I was the man responsible for ensuring the whole bank was mobilised to help with the venture. And that involved me going to them and saying “come on, surely you can give me somebody for a week” and that was first of all that you're breaking down the barriers and engaging them; then you're trying to involve them. The other side of the coin was that you must make sure you get a sign-off from them through something called the “Group New Product Approval Process”, I don't know if you've come across that. But the Group New Product Approval Process is really a risk assessment, which was round the expert areas of the bank, and they'll sign off a new offering; so it was not just a product, it was an offering and it would get signed-off by the Treasury, Audit, Compliance, Security.



**DIAGRAM ON RBS JOINT OFFERING WITH A THIRD PARTY**

18. **GS – Yes, PD has given me a similar description when he was explaining the decision-making – that is actually one of the areas I am interested on. He was talking about the overall outset and how the different bits and pieces were interlinked; he explained how complex it was.**

19. IJ – Right, yes; it's extremely complex. Basically we had weekly project meetings with the third party; we also had our steering group meeting fortnightly, which was chaired by Peter normally, but in reality it was often chaired by me, which was with all the key Royal Bank people, leading the Royal Bank workstreams. We met here every fortnight on Friday; Peter Wood and I met with the Head guys and their project team every fortnight on Wednesday; there was a whole structured communication web around us, which was very effective. We just had a PIR the other week and it was effective. It was felt that that was a good thing, although it was difficult.
20. **GS – Once you mentioned PIR, that is one of the things I am looking into as well; and let me explain that. Because in general technology implementation, and specifically in complex operations like banking, is as we say a very uncertain thing and something that may well deliver unanticipated benefits, or it may incur unanticipated costs as well. So, in that sense, setting up the milestones and doing implementation reviews every now and then is considered very very important. And one of the things I usually ask people is 'do you carry out a PIR?' Some of them say 'Yes', some say 'No'. Would you like to tell me a few things about the PIR? What is it focused on? Is it about what you have got out of it in terms of costs and what was spent, how you could have done it better and so on?**
21. IJ – All of these. Now, there is a formal structure at the bank; the PIR we carried out a couple of weeks ago was based on a structure. And you're absolutely right; the headings were things like communications: how was our internal communication as well as how was our communication with the third party, how did that work, how did the meeting structure work, did we support each other, did we have problems on our side. Another major section would be Budget: did we overrun the budget, did we adhere to the budget, what were the big things that could happen, could we have seen them coming, how could have we managed them better. That's a classical PIR for us. And then depending on the nature of the project it would be, are the benefits starting to be realised now, will they be realised. Often a PIR would be too early to tell that; you would then have some sort of Investment Appraisal depending on the size of the project further down the line. For smaller projects it would be probably quite informal like "this isn't working, stop it" {laugh}. But for the major projects, we are contacted by one of the Head Office for that and be given a large form to complete. A PIR can be as rigorous as you want it to be in the bank, but it must basically cover columns about how the team worked together, financials about the budget, and the other major point we covered was key learning points and key findings; because by going through it we understood some new things about our system that we found out. And we built some new pieces of functionality.
22. **GS – Are there some formal PIR templates? Is there a way that I can get hold of them? Of course I am not looking into numbers, so you can delete anything you think is sensitive.**
23. IJ – Yes, I'll try and see what I can do. What I'll do is that I'll try to inquire the template owner whether you can include this as an appendix if you wish. Maybe you'll just have to replace "Royal Bank" with "Major UK bank".
24. **GS – I am following a confidential approach anyway.**
25. IJ – OK, just remind me when you send me an email.
26. **GS – Right. Now, regarding what you said about putting down learning points. This actually brings me to the issue of knowledge management. First of all, learning from implementation is very valuable; how is this encoded or**

**put in place so that it can be used for next projects? As you said, the first project you did was quite unstructured; the next one was more structured. I guess there was some learning there.**

27. IJ – Well, PIR is obviously a formal tool. The biggest factor though is a kind of obvious one and a soft one, if you like, and that is *people*. Why did we do a lot better in the second project? Because we had a lot of the people who were involved in the first project, who had learned from that. That would be the honest answer. And I think, what the Royal Bank is pretty good at, is building centres, cores of expertise and reusing them. And not only reusing them but people like me have a network of contacts; so, if I was on a project I'd never done anything like it before, I would certainly know people in the Bank who had. I would then go and spend some time with them and get up to speed more quickly. So, for me the biggest part is actually reusing key people. It definitely helps; it sounds so obvious, doesn't it? But it does make one hell of a difference! And I've heard myself countless times on a second project drawing experience from the previous one; and if I had to do another project of the same kind next year, I would like to think I'd be better at it. But even what templates or forms you draw on during the project are important: we may say "we need to start recording this – fine, there is a form to do that;" and if it works, when we start a new project, we would have a set of them and say "here are the processes we've put in place to manage this project". And it changes year on year; it grows. So that's the biggest thing I think. Documenting; clearly documenting what you're doing is always important and storing it effectively.
28. **GS – Is there a formal process for doing that?**
29. IJ – Yes we have; the IT guys will probably give you a better version than I can, but we have formal methodologies for documentation in the Royal Bank. If you're working with a third party, you can't stick to them rigidly, but more or less you've got terms of reference, requirements specifications, system design documents, implementation plans, test plans, so at the end of the project you have a clear set, plus your PIR. If you're talking about the effectiveness of the reuse of information and learnings, I would say that the totality of that documentation is probably about 40%, and reusing the people, or the people's thinking is probably 60%, even maybe higher. You don't know how much you know until you try to put it down. Some IT people would say "that's great; we just go and take the 'system design' off the wall", and I'm sure this is more valuable for them; they see it as "this is the code".
30. **GS – I actually wanted to move more to things, which are more related, if you want, to the role of the Finance function in the overall project implementation and decision-making. You've been involved in quite a lot of projects on the IT side. In terms of making the decision to do it and in terms of bringing it to an end, how have you seen the role of the Finance function work there? You know, in terms of identifying and measuring costs and benefits and the like.**
31. IJ – Their expertise is critical, because when we're building a financial model for a joint venture on the Internet, there are so many aspects to it; you need someone who will set it aside and make sure they all come together, and check the Profit & Loss, or Balance Sheet or NPV calculations, or probably all three. Why am I saying that? Operationally, I can work away and come up with a unit cost for a product for all the operational bits, but it means nothing on its own. Somebody else will hypothesise on the number of units we'll sell, and what the average price will be; you need to kick the tyres on both of these things. You need someone independent, and this is where Finance comes in. You also need someone who can then bring to the party "OK, so you're saying it will cost 10 pounds to produce and sell for 15; so we make 5; but what about the cost of the project? So when are

we going to pay the project? What about the cost of funding, for example, Treasury costs?" It is the expertise to bringing together the whole picture, and then understanding for each project what the key dynamics are. That's where I think Finance are invaluable. Because in different projects, different lines of the financial model will be critical; and for some of them it will be units we sell, but for others it will be balance levels or what the funding rate is. So, they're a key member of this core team. And the four main streams on this project were Operations, which was about just about everything, IT, Commercial Finance and Legal, because we had to drop a contract with this third party. Finance were closely related to me, because again we were dealing with all the operational cost and volumes and what the service level agreements would be, how many are we going to commit to produce them, whether we or they have to pay a penalty etc. when more staff come onboard, and I could then say "right, if we start to require to produce another 5000 a week, we're going to need another 2 people". They worked closely with IT to get the IT costs and the running costs {IJ draws on the diagram}, and they worked very closely with the Legal people in terms of the detail on the contract. That's how they formed an integral part of the whole piece and bringing their own expertise into play.

32. **GS – One point there, is that, as in any project, you have to work on several assumptions like assumptions on volumes, on unit costs (which is largely connected to volumes for example) and so on. You still have to work with some assumptions; how are these assumptions being subject to reality checks?**
33. IJ – There are several different ways. One of the ways is within your own 'bubble' {IJ points to the diagram}. Then you're probably winding it to find if it is Finance-related. And you have another reality check there; then you have your Steering Group, which is yet another reality check I guess; then you have the Group New Product Approval Process, which goes off to the likes of Treasury, which is a pretty critical one here; Treasury is going to say "OK, you want to sell 1000 savings products but if we take X balances on the Royal Bank's books, it's fine for this project, but that means that some other fancy credit ratio changes and our rate with the BoE will change to put that overnight, so there are impacts. So it is an iterative thing and there's a knowledge hierarchy there; at the end of the day, most of the hypotheses we have are right or near about right; this guy here {IJ points to the Finance bubble in the diagram} will refine them. But we've got at least a steering group and more particularly a Group New Product Approval Process, and amusingly Group New Product Approval Process is the title for collecting all this expert plans together and making sure they sign-off the process. Essentially, PD here {IJ points to the Finance bubble in the diagram} would have a direct relationship with somebody at the Group Treasury and probably someone at the Group Corporate Finance, and certainly somebody in Group Tax. So it really becomes a little web here. And that's where I said about the Royal Bank really reusing expertise; when you go into Group Tax they will say "I remember you guys were doing a project last year, and it was a little foible around some of the tax; better check this out", so they will check that. Does that answer your question?
34. **GS – Right. Yes, it answers my question. Going back to the identification of costs and benefits, from the projects related to Internet banking that you were involved in, which ones would you say were the most important unanticipated costs or benefits, from your experience? And how have these been worked on, after they were identified?**
35. IJ – I think the hardest costs to control are the development costs, by nature, in my vision anyway. It's certainly the IT development costs. For the likes of Marketing at the end of the day you will cut your budget or hold to your budget; it's kind of up to you. But IT, you've got to develop certain security protocols, and in the nature of an



Internet offering, it seems almost as a part of the core that you've got to engage several consultancy firms. So, I think the ability to plan the outset, adhere to the plan, stick to a budget is extremely difficult to do in this sort of Internet development; there always seem to be factors coming up which delay the development, which bring more cost and which prolong things. Supposedly Internet development is still fairly new and security protocols are still being developed. And you button a lot of money and design pieces of functionality which maybe subsequently throw away because it will be too clunky in the final site, or because they don't match-up with the Royal Bank security protocols, which are the National Banking Security Protocols. Another main factor, for pushing out IT costs is the sheer integration over the Net and the complexities around integrating; this for me is the biggest thing I've incurred financially, in terms of costs. We find that many Internet offerings, and certainly these two major projects were trying to integrate a banking offering to a wider site. Now, that wider site may be modularised and you're adding to it. But even when you're doing that, you're still having to join the master database and the updated protocols and keeping the whole site in synch. That, in my opinion, is grossly underestimated; the complexities there. Because at its worst, you find that you've got one IT team here {at the one side} developing this, maybe on a slightly different technical platform from here {the other side} and the cost of putting it all together is horrendous. And then a slippage on the one side causes a cascade of slippages, not just in terms of bolting them together and get to the test phases, but in terms of what you'll find in major companies is that there's key IT resource here {IJ points to the diagram} and the plan will say "15<sup>th</sup> of June, they will be released to work on Phase 2 – 15<sup>th</sup> of October they will be released to work on Phase 3." Does that work? Because Phase 1 starts to go back, Phase 2 starts to either go back or starting in a haphazard fashion. And there's a real domino effect and you end up to a mess. You end up trying to release phases 1, 2 and 3 in a very short time frame. That doesn't work. If I was going into a project of that nature next year, I would say "let's not underestimate integration costs here; let's spend a couple of days in a room understanding how these 3 offerings are going to link together, what the main stumbling points are going to be and what attention can we give them to make sure that they do bolt together."

36. **GS – Speaking of unanticipated costs or benefits, were there instances where, for example, you had more volumes than expected and the system was not geared up for it? This is a quite typical one.**
37. IJ – OK. Yes, when we launched TPF venture, and it's a good prompt from you actually because it links back to the financials and the financial modelling. That was a really good example; and it was such an attractive offering from a very strong brand, Tesco. It just took off beyond anybody's expectation. So it was a really good news story in one dimension, and a real horror story on another, because of customers' perceptions and the like... but I think it's to the credit of the bank and Tesco and they go over that; and it was such a successful offering TPF. But that was a case where they totally underestimated the power of the offer. How that happened, I don't know but there's certain people no longer with either companies {laugh}. It's funny you said that because I spoke about things like learning and the learnings becoming your armoury; both the ventures I've been on in the last two years, I've sat down there and said throughout them "come on guys, when you get this buttoned down, what price are you going to offer it at? If you're going to go 'price-led' then it is going to change the whole model!" Because we're going to service these products from our processing centre in Glasgow. But if you're going to get in with the best interest rate in the market, then you'll have to pay for extra staff to be sitting there just in case. This is something I knew; and it's so engrained in the Royal Bank culture now that you don't think about it. Because when you make a mistake like that, or have an experience like that, it sticks with you forever. The effects of being understaffed are much worse than the effects of

being overstaffed. Because at the end of the day, hiring another 10-20 people just to have their capacity is nothing compared to having these problems.

38. **GS – Right; you said something about going back to the financials at some point. What were the financial implications? I mean, in terms of the overall evaluation process or the PIR, there is obviously the cost of flexibility or the cost of control, if you like; have you seen these things being incorporated into the investment appraisal process?**
39. IJ – I certainly think that, from my focus, it's just a firm message that we should make sure we have a clear understanding of our volumes; and through that Group New Product Approval Process that's always a message that comes back from any area related to the operational piece: don't underestimate the effort here; make sure you get the numbers right; let's build a proper model with proper processes. And we have core processes in the Royal Bank operational centres for opening accounts – bank accounts of any kind – and doing any kind of account maintenance. "Do not deviate from these standard processes". The brand that the customer sees can be as differentiated as you like; but once you cross that line you have to keep it the same; that is a big learning point. Because you start mocking about with them and the Service Centre persons say "I'm dealing with this X venture; they have things slightly different". If you have Tesco, Natwest, and all other people each doing things slightly differently, you have a problem. So, keep it that same; get a uniform process. The customer doesn't care because all these are core processes. There's no value in differentiation with them. If the customer wants his money to go from A to B, you just have to do it as quickly as possible. So that's an ongoing discussion when new third parties come along; because they always want something better. We say "actually to give you something better, we'll have to be beating our own performance" and a) we can't do that, or we would be doing it, and b) even if we could do, why would we give it to third parties? So we say "we'll give you the exact same as ours and we're happy to do that to serve your product and your brand differentiations".
40. **GS – Right. Continuing the same discussion on things like costs of control and so on, I'd like to move on to what is known as intangible benefits. What I'd like to ask you is whether, from your experience, you see any value in putting in numbers to try and quantify somehow some of these intangibles. Just to give you an example, - I think a few of them were mentioned in my email – things like benefits from security, customer loyalty, systems rationalisation (where when for example you have an Internet offering, because of all these integrations you have to rationalise the overall systems to be properly integrated); this brings in benefits as well as cost implications. And there is a host of such intangibles; do you see any value in attaching numerical values to them?**
41. IJ – The last one, certainly: systems rationalisation. And we definitely use that when we're making decisions; we're going to say "OK, to do this Internet offering, it's going to cost us X on IT spend; but once we've done that, it will position us to be able to take any number of third parties, and that's the kind of dynamic we go through". So yes, we do put a tangible value on the specific project and we then have a discussion or a brainstorm on whether this is a part of our strategic intent. So, if we're going to spend that money here, is it reusable elsewhere? So the actual cost, we've got in the cost model of the project, but we may cover that by saying "OK, the cost looks like that here, but once we do this, we can reuse the system etc" which is either consistent to the defined strategic intent when we started this project, or it might just make us think of some new benefit we can get out of it. Or thirdly – and this has happened – we just don't swallow that cost, because we cannot see any use for the functionality the project would develop, for the next 5 years or so, and there's a big cost for us. So we either persuade the

third party not to do it that way but do it differently, or we won't proceed. Customer loyalty is not really my field. What was the other example you gave?

42. **GS – Security costs or benefits; there is a contention that security should be ensured at all costs. However, I know security does have a price; for instance, paying 5bn extra for security to reduce risks by very little is not really an option. You know what I am talking about.**
43. IJ – Yes, I do. We have clearly defined standards for security, which we basically must meet. And it depends on what kind of platform we're on, we will estimate the costs for meeting those standards, and that's what the costs will be; the real costs, the tangible cost. Intangible benefits from security is a really interesting discussion; and this is one where we really bang into the third parties because they want their site to be fast and sleek and all those things, so that the customer logs on and can do everything quickly.
44. **GS – There are legal issues there, insurance issues and so on. What I'm saying is that the issue of security is actually widening up to a number of other relevant issues.**
45. IJ – Absolutely; but I think even the mindset of the third parties is important, or marketing people from the third party who have not a banking background. They do want their site to be as sleek as possible and doing Banking Standards Security Protocols is nothing like sleek, but it does make it secure. I would say that the benefits are that you're telling people that the security on this is by the Royal Bank Banking Standards; any complaints about it, we're protecting you. So, there's a password, first digit, third digit etc. I log on myself and I find it a bit time consuming. You do get fed up as a customer, but if you put another hat on it you say "well, I can see why". It is a hard one to sell. But we are able to say that having that secure site is a good thing, once you manage to get over the big debate over the time it takes. But we want the customer to be able to choose a new name for themselves, a new password or phone up and do that. But you need to go on a security system on the phone then, which is again a hassle for the customer; but we have to do it.
46. **GS – Right. Going back to the financial and strategic appraisal of this, you have for example this part of the financials where the group are looking to define certain aspects of implementation, develops a model and may come up with a positive or a negative NPV or other measure they're using. What is of interest there are the benefits of IT, which link to the long-term rather than the short-term. This regards the overall decision making for doing or not doing a project. What is, if you like, the relative weight there of the financial figures? For example, if you have a project that gives a negative value to the financial measures, that doesn't really mean that you shouldn't go along and do the project because there may be strategic benefits in doing it. What is the balance there?**
47. IJ – OK, this is my own opinion: I would say that Finance is very high in organisations of our size; why do I say that? Because it is kind of obvious that it would be. But also because we're a huge organisation now, so we're going to have a change plan for the whole organisation but many many competing projects, and they're usually competing for IT resource; that's usually the first priority. So, the top people at the bank will agree on what they're going to spend on IT for a year. There's some calculation but I don't know what. Then you've got this pool of IT resource, which has to be divided across our core initiatives. So, you have to rank these core initiatives, and the easiest way to rank them first-off is to stay with the financial benefit, estimate your costs and forecast benefits. If you get a really good ranking, then the discussion can begin. But again in an organisation of our size, you get some big benefits from some big projects; these are kind of 'no-brainers';



it's going to happen regardless. And then you've got another set that are further down the scale, which are making a loss but people will argue on them on a strategic basis. It's got to be a strong argument though. So, the first way is to hunt the financials; there's no doubt about that. For this other set of core activity, it's been very big because it does change year on year what the strategic intent may be. Some things *will* get through because they need to be done. Upgrading security is a good example I would say; that would get done. {laugh}

48. **GS – Yes and I presume things related to regulations.**

49. IJ – That goes even above the financials; so you get legal and regulatory; then you have your financial benefits. And then if there's any money left, and you want to argue for a strategic project that makes a loss, then you do it. And I guess a couple of years ago, investing on Internet development was one to go for.

50. **GS – This actually leads me to the next lot of questions, which is on expertise and expert groups. In relation to putting forward an IT project, in large organisations, what you usually have is a silo effect, whereby you have the different silos of Finance experts, Banking experts and so on. In terms of doing an IT project, specifically an Internet banking project, what are the power relations between the different experts? Which expertise would you say is more important and powerful?**

51. IJ – Definitely the IT-led, because I guess of the knowledge they possess and that they have the knowledge to break any kind of deal or to force any point home – in theory. They can bamboozle you with science; 'that will work because of this and that', you know. But the model we follow at the Bank is that we work very much in close conformity, close partnership I would say, these two groups here {IJ points to the 'RBS Ops' and 'RBS IT' bubbles in the diagram}. We engage all the other people as required, so the strong dimension is this one. So Eddie Webb was leading this team {IT} and I was leading this team {Operations} and if we could agree on our position, and we usually can, that is a very strong access on which to tackle anybody else in the business. They all have their own power; almost bizarrely, Legal have some more strength than IT, because they can see if a contract is dangerous to the Bank. So, you're going to have to go back and change your operational process, because for example, "we're not defining this or that in the contract, because it will give us trouble". So you'll have to change your process or change your approach or else Legal will say 'No'. Same as Compliance; Compliance can refuse to let a website go up, because it legally or reputationally damages the Bank. So, everyone has their own power. But the strongest access is this one {IJ points to the Ops-IT bubbles}.

52. **GS – When you say that legal people know the legal detail, which you don't know, they can actually stop the whole thing. From your experience, not only from working in the Royal Bank, but also from projects you've heard of, has any of these groups used its power in a political sense? For instance enforcing what they believe to other groups to make the decisions turn this side or that side.**

53. IJ – Yes. If not project-specific, certainly in the business as usual terms, you will get people like IT forcing their strategy of moving to a common platform, and using that strategy to shape projects, or to shape the way that business as usual activities are structured. That is quite political. Politics do play all around the place all the time.

54. **GS – What I am actually looking at in this, regarding the Finance function for example, is the issue of 'negotiations vs. arithmetic', in the sense of which one is most important.**



55. IJ – Right, definitely if you have strong players heading up the commercials, suppose you have the Finance function: Finance are doing the financial modelling, then you have people leading the commercial deal who want to do the deal with a third party. If they are big strong players, they will influence the guys at the top of the Bank to make that type of commitment. Because dealing with third parties is a peculiar type of project. And there are other projects that probably follow what we've been discussing about things not being particularly financially attractive, but people keep wanting them to be done for a certain reason. Politics can really kick in there in two ways: One, they will lobby very senior guys at the Bank so if you get very senior Directors of the Retail Bank who really want to do something that looks unattractive, they will go to FG and try to sell that in their own classic negotiating ways. The other way they can be very effective is that, if something is happening and they don't agree with, or think that it is a diversion of the Bank's resource to go and work with this third party, but really we should be doing something else, then they have a whole range of tactics by which to delay this work, such as not releasing core experts to help with it. That is the classic: "Sorry we have no one to help; you're on your own". And then they may even say, "I think we shouldn't really be doing this without any of our expertise in there" – "Give us some expertise then" – "We haven't got any" and then you may even cancel these projects you want to work on to free-up some IT people. So, yes; the control over people and people's time allocations is a strong tool for these things.
56. **GS – Right. One of the things that I would like to talk about is short termism. We are talking about projects where the benefits take time to materialise; IT and Internet banking projects are like this. Building the financial model involves the use of financial methods, be them NPV or DCF or Payback or whatever. There is a contention there that the use of these methods promotes some kind of short termism, because the future is so uncertain and focusing on the results of such methods is something that makes managers think of the short term benefits and prefer the projects that appear to be giving short term returns. Is this something that kicks into either the politics or the overall processes?**
57. IJ – Understood. In the Royal Bank, I'm quite confident that we strike a good balance. Your Change Plan, your commitment with IT resource, Finance is a big player there. In terms of leading the Bank forward strategically we have some of the best people you can possibly get at the very top; FG for example. They have a real strategic view to shape that change programme year on year effectively. Rationalisation of the back office platforms, internal platforms between Royal Bank and Natwest, you've probably seen the press announcements last week saying how successful it was. And that is a long term thing; getting everyone on one platform and then grow. And I have great faith that these guys see the big picture and ensure that quicker winds, if you like, are moving us towards that. The Strategy card is definitely a strong player in the Bank; but in the old Royal Bank we had some kind of ethos that you should achieve your strategy and move towards it incrementally by trying to deliver projects that deliver the benefit themselves. To get over here from here {IJ brings a fictional example by pointing on the table}, we can do that today, but it would cost us a lot of money and we'll have a negative NPV, but again of that's our intent, we can move to our target incrementally; you've spoken about rationalising the systems: that may be a very good example. So, we would cancel a project on that because of its specific NPV, but if that moves us towards our strategic intent and would enable us to provide banking services to any third party suppliers, then that's fine, because that will take us to there. We don't have a metric for it; I don't know if that would have at all a point. But, at times, you need to have a bit of faith and do that. And you have a number of committees to do it; a growing number of committees as the Bank is growing.

58. **GS – Speaking of the NPVs and the methods, I don't know how close you are at all to all this; I guess that as you're in Operations, you're not very close to that. But anyway, from your experience, has there been at any point - or is there now – any kind of research done in the Bank for looking into either newer or more sophisticated methods for financial modelling or investment appraisal, than the traditional ones, like the NPVs and so on? Does the Bank see any value in doing that?**
59. IJ – It's tough to say anything on that because it's out of my expertise; you'd have a lot of questions that I wouldn't be able to answer; it's just without my field. I tend to be one of the guys that is given a project to do, rather than the guy that evaluates them. Once you actually start doing it, then you become part of the evaluation process, because you're sitting down with your feet in the muddle and you're challenging or building or inputting to each line in the model, rather than building the model itself. So, it's probably not my field. I mean, I do get the opportunity to say 'hang on, you've forgotten about stationary costs' or 'that operational cost should be much higher' but in terms of the actual tool used, Marion is probably more suitable to ask.
60. **GS – Yes, I have spoken with Marion on that but as things develop, you may hear today something that was not around yesterday. When you get involved into a project, you get as you said more and more linked into what these people are looking for from your perspective, the upsides, the downsides, the costs and benefits and so on; that is why I am asking this. Now, I just wanted to go back to a point that you made when we began, and it was about changing banking products, where you said that the real innovation is not about altering the product but it has to do with the brand, like Virgin One account and so on. I just wanted to reiterate that point.**
61. IJ – OK, let me expand on that; if you're searching for the golden banking product, you're going to have to be prepared to invest a lot of time and money, and see if people can think of one; that's my view. It's much better to take more or less an existing product and try to do something a bit different with that, or attach to it more attributes. We have a very successful money transmission account called the Royalties Account, and Natwest also had this kind of account, it was called Advantage Gold; but these are very successful. If you think of these as new products, you see them as exciting, and they *are* really good products. But that is just a current account with the services that a current account always comes with; standing orders, direct debits, a chequebook, a cash-link card, ATM card etc. What it does is that it gives you access to a whole other range of services; it links in. So, if it is an Internet channel that you want to develop, first of all you should be thinking "are our existing products appropriate for this channel?" If they are, start selling them; that's what a bank would do. A third party comes along and they want something fresh. In my view, they should be saying: "a banking product is a banking product. Do we want to be in savings, loans, money transmission, mortgages?" That's about it. If we want to take them online, let's keep it simple, we can differentiate on price, but what value-added services can we give the customer? Let's give them free this or free that, give them this information on the side or that information on the side; but it's the core product, route to market, time to market, keep it simple. The banks have been selling these for years; so keep selling that!
62. **GS – So, you're saying that there is no link, if you like, actually between the channel, the Internet as a new channel and probably that's what banks see in it, and financial engineering.**
63. IJ – Exactly. If somebody has got a great idea for a product, then great! Have it. But don't try to force people to have an idea.

64. **GS – Well, that is more or less the questions that I wanted to ask. One thing that I usually ask people is, from what you've heard, do you think that there are any areas that I'm missing out in this research?**
65. IJ – No, you've spoken to PD and ML, which is a good thing; you spoke to me, and I guess I'm a support player in that respect.
66. **GS – I mean, there might be issues in technology implementation, Internet banking implementation that I'm missing out.**
67. IJ – Have you spoke to anyone from IT?
68. **GS – Well, I spoke to someone who used to be with RBS but now is in another company.**
69. IJ – OK then you have the IT side as well; that's fine, I think you have an adequate coverage.
70. **GS – The other thing I would like to ask you, do you think that there is anyone in specific that I should talk to?**
71. IJ – I can put you in touch with one of the IT guys who is involved in these projects.
72. **GS – That could be very useful, because speaking to someone who is currently on IT with the Royal Bank would be very useful. As I said, I spoke to someone who used to be with RBS and now works for another company; so it would be a useful contact.**
73. IJ – I'll see what I can do. I'll send your paper on to a couple of contacts I have; their diaries may be worse than mine.
74. **GS – Right. Thank for this. The third thing I wanted to ask you was about documentation, and I just wanted to remind you on that.**
75. IJ – Yes, Post Implementation Review documents; I'll see what I can do for that.
76. **GS – So, I'll send you an email.**
77. IJ – Yes, send me an update; I'm away for the next fortnight but I do access my email from time to time.
78. **GS – Alright. Thanks very much for everything.**

### 1.9. Interview, 16/04/2003

1. **GS** – The way I would like to start this discussion is by saying a few things about myself and my own background and what I do in this research, and then kick off the discussion; and the main areas, just to give you an overall idea will be revolving around things like decision-making in projects for Internet banking or IT within the bank; I am especially interested on the role of the Finance function in the decision making process and the overall implementation process; I would also like to speak about investment appraisal techniques and how these influence decision making; and what is your view on that from an IT perspective. Other things I would like to talk about are things like reporting and the accountability factors; and finally a few things about Knowledge Management (KM) and how all these things integrate into the investment appraisal process. So, my background: I am originally an Electronic Engineer; I specialised in telecommunications and I've worked on that field for a couple of years back in Greece; I did my MBA here in Edinburgh University and I am currently a Research Associate with the University and doing this PhD. What it is about, is investment appraisal for Internet banking projects in specific; my perspective, if you like, is from the Technology Management side, and I am looking into things like IT benefits which have some serious links to issues like the 'productivity paradox' on things not being measured or not being measured appropriately, the learning gaps in changing the organisation's culture towards technologies.
2. **DM** – {laugh} I know a lot about that!
3. **GS** – I thought you would {laugh}. Would you like to tell me a few things about your own background?
4. **DM** – Sure. I've been working with the Bank for about 15 years now, all in kind of technology; I started as a graduate and worked pretty much all the way through development to project management which I do now. The strongest background I have within technology management is within MI in terms of the design and building of data warehouses; I've also been involved in a number of joint venture Internet banking projects – that's where I was working with IJ. And then again, at the moment, I'm back working within MIS. So, I'm part of the technology function of that in the overall Group Finance area, so in effect we kind of look after the ledger regulatory report into the Bank of England and things like that.
5. **GS** – Right. I'd like to start this discussion by talking about your overall experiences with Internet banking projects, either within the Bank or working in a joint venture with an external company; and the areas I'd like to focus on is the decision-making side of things from the beginning of the projects, where different propositions, if you like, compete with each other for a specific IT budget, and then move on to talk about the teams' setup and I am mostly interested about the role and the power of 'silos' within the company; like, you know, you have the Finance function, you have the IT function and all these different sides, each one of which is representing different areas of interest. So, starting from the decision-making process, would you like to tell me a few things about those issues?
6. **DM** – There are probably several ways that a project could be kicked-off, or that we would actually start-off looking into a project; obviously somebody comes up with an idea like "would it be good if we did Internet banking?" as an example. "everybody else is doing it, so why aren't we involved? Why aren't we in that area?" So, initially lots of things start-off from the Strategy and Architecture area



that we actually have, and that keeps up to date to what is going to happen in the current environment; what the new technologies are, whether these new technologies can potentially benefit us, and possibly, when they see an opening, given their knowledge of the way that the Bank can set it up, maybe they can see where we can make, say, a financial saving in terms of numbers of people, in terms of consolidating services, or just to keep up with things; to a certain degree maintain our market advantages. So, there are sorts of ways that we come about deciding to do it.

7. **GS – I noticed that you mentioned having a look at the initial layout, having a look at what this could save to the Bank, or what the benefits would be. This actually touches on the processes of building the Business Case, building the Financial Appraisal etc. In the initiating stage, how deep is this calculation, if you like, of costs and benefits involved?**
8. **DM –** Probably not as deep as it should be is probably the truthful answer. For example, the seed of a project may have been floating about for quite a while before it would even come down to my team level to have a look at. One of the things that we tend to do here is that we have a Financial Year, but our Development Year tends to run from January to December effectively. So towards the end of the year, about the end of November and December, we start having a look, thinking “well, we finished this programme of work; what are we going to do next?” And we tend to either ask people to come up with ideas or go out for business areas and say “well, where do you want to save your money? What IT do you particularly need to help you to a function? What do you want to do better?” And literally, a whole list of projects or items for discussion are produced, and initially all the various business areas that roll up to a particular division within the Bank get together and they come up with the top 100 ideas or areas where they reckon they could save money or where it would be beneficial to have some kind of IT input. Probably the next stage after that is that the Business and IT then get together to start looking at these ideas and trying to shape some kind of programme of work; and that's at the very very high level.
9. **GS – Can I stop you just here? You said that you have a number of groups that come up with these 100 ideas or whatever about how they can improve things by IT etc. Probably you cannot accommodate these 100 ideas, so you have some sort of filtering process. What is the basis for that filtering? My question is actually ‘is the basis for deciding which ones are the most likely to go with, argumentative, or is it quantitative? Or is it something else?’**
10. **DM –** It is a bit of both. There is a high degree of argument that actually kind of goes on but there is a very high level quantitative indicator. The main measure we try to use is how many resources will we free up, by replacing a function using technology. For example, if you take salary, location, price of a desktop etc, you come to a figure that may be 30K pounds and that is a value that you can place on a resource. So, for them to carry out their particular task, we're saying ‘that is going to be 30K over the course of a year’. And they try to engage with it. For example, say it is an operation that is currently done in all our branches, so we've got 2000 branches, and we've got one person in each of these branches that does this function. So, why don't we just get 10 people to do it all in a centralised area and fire all the technology in that centralised area, so that effectively we are able to save 1900 people. The trick is that we don't actually necessarily saving that money by actually getting rid of those 1900 people; we just employ them somewhere else. But we see that as a kind of saving and that is part of our cost-benefit account, In terms of trying to estimate the cost.
11. **GS – That brings me to another issue, and I'll give you an example. In particular cases, you're working – as I guess people always do – on a**

number of targets or, if you like, assumptions. The brightest example that comes in mind, which comes to the miscalculation of such benefits, is the technology of robotics back in the 1970s in the UK, where all cost-benefit analysis that was done then for implementation of robots in manufacturing was based on the fact that it was going to be a labour-saving technology; at the end of the day, it turned out to be more of a material-saving than a labour-saving technology. So, there was an omission of benefits there. I don't know if you see where I am getting. The technology and the whole process of implementation has a number of areas that can be unanticipated. So, how do you work around these assumptions? Is there a process in place for taking account of the fact that there may be some kind of 'preferred' assumptions in doing the calculations?

12. DM – I'm not too sure I can answer this. I actually don't know if there is such a process. I'm there are the basic assumptions that go on. I have to say I'm not very close to this. I have to say that the whole area of cost-benefit is not the thing that we're particularly good at. It is something that we do seem to struggle to achieve; mainly because, certainly at the inception of projects, we're not very clear, it's such a high level estimate that we put in, in terms of the costs and the benefits of what we're actually doing. I'm sure there are many many cases that once a project has actually been completed and implemented, when we have come back to actually figure out what the cost-benefit has been. It's that we haven't been able to measure it at all; it's just not there. The majority of the projects are just on the kind of labour-savings against technology cost. The exceptions, I would say, are some of the Internet banking projects whereby we can see the benefit of having a new channel, a potentially new customer base or a wider customer base; and same with the joint ventures where we have potentials of marketing into a larger customer base that isn't actually our customer base.
13. **GS – But these benefits, if you like, are not actually on the quantitative side; they're rather on the strategic side.**
14. DM – Yes, they're more on the strategic side; the cost-benefit there comes from assumptions that we will have by the end of the year; say, X number of customers on this product, either earning this rate or paying this rate, and it's all based on the simplicity of figures; we have definite targets that we have to meet after 1,2,3,4 years and we have our breakeven point.
15. **GS – I see; that brings me to another area of questions that I wanted to tackle with a bit later, but I think this is a convenient time just as you mentioned that. Do you think that the investment appraisal approach used, is driven by reporting? What I mean there is, you've just mentioned some targets that the company has over the year, so this is what is going to be reported; so, in that sense, moving backwards to the investment appraisal process for the project, you say "therefore, this is what we need to measure". Do you see that happening? And, if it happens, do you see there is any omission there in not taking account of some unanticipated or other potential benefits from IT and Internet banking in specific, that you would have been able to measure and that you would have been able to put in your Financial case, if you like?**
16. DM – From my experience certainly of the kind of Internet banking, one of the biggest difficulties in selling the initial cost-benefit is that since for us it was such a new technology, a new area of involvement, that there was an involvement from an awful lot of third party companies in there; so we probably didn't have the level of expertise that would be required. So we got these third parties coming in and that was a very difficult thing to actually estimate, because since it was a new area for us, new technology, it was very difficult to estimate or predict what exactly the requirements were. So, certainly in new areas, where the technologies are new, it's

almost a kind of a learning experience that was going on. When we have more mature technology it becomes a lot easier to go "well, OK; we want to develop something; it's going to cost us this amount and it's going to take this amount of time" and you become fairly confident that you can meet that and that there's going to be a lot less surprises along the way; whereas when you have new technologies like the Internet banking, there's a far greater risk for surprises coming along the way, and there's a lot bigger learning curve we have to go through.

17. **GS – So, from your experience with Internet banking, what would you say were the most important costs and benefits that were not initially accounted for, and that you gradually discovered during the implementation of the project?**
18. DM – Certainly in terms of costs, I think the one was the interfacing with all the other third parties; I just think that the more often that is, effectively it seems to be that the greater the cost is going to be, because you have a third party integrating with a third party. And it certainly can become very difficult to control and manage; so the amount of management time that you actually put in, again, is a lot greater than anticipated.
19. **GS – Is this because you have to integrate each time with a different type of third party, and the learning curve is therefore longer?**
20. DM – It is; and also when you're dealing with third parties, there's a lot that you do on a contractual basis; there's an awful lot of agreeing requirements, signing-off requirements, if there's a lot more change than there tended to be, there's a lot more governance around those changes, there's a lot more time to actually go in and say "OK, we need to change this; hold on"; there's the change control, we have to actually decide whether we can do it; obviously you finally decide that you can do it but that is more money put in. So, you get an awful lot of that going on, whereas if it is internal you tend to be a lot more flexible about such things.
21. **GS – Right. You spoke about costs. How about benefits?**
22. DM –The benefits are probably slightly easier for us to measure because a) Internet banking for us is another channel for our products and so the benefit for us is again on the number of customers, the number of accounts they actually open, the rate of interest that we either charge them or they pay to us, so that's fairly standard for us. So we have pretty good models for introduction of new products and all we would have to do is plug-in the costs of the channel and it would work out the cost-benefit. In terms of benefits that would come along the way that we hadn't anticipated, I can't think of any; any surprises that came to us that we hadn't anticipated; for example that customers are going to do this or that.
23. **GS – Right. You just mentioned the cost of getting in new customers and the benefits of it and so on; there are several things that, if you like, are difficult to measure. I'd like to ask you whether there is a process in place for measuring these: things like for example the cost of recruitment, retention, cannibalisation etc. Are you able to locate these things and measure them in one way or another?**
24. DM – I'm pretty sure that there are things available to us in terms of what our HR department pretty much goes on. They have some costs of recruitment and retention; a common area with this probably that I'm sure we will have is to do with Service Centres, like somebody is just setting up standing orders every day; sometimes we get them in by the busload, some just last six months, some last a year. So, I'd be very surprised if there isn't some substantial evidence of what



actually goes on in there and measures for the costs of all these. In terms of relating that to project costs and the like, I don't think it's something that we do.

25. **GS – Right; that was actually my next question; is there a feedback from the HR department for instance, which holds these kind of measures? Of course these figures are based on past experience in general. Are these integrated into the financial appraisal or the overall appraisal, if you like, of yet another Internet project or another Internet banking venture?**
26. DM – In terms of staff recruitment, probably yes. In terms of customer recruitment, probably not. Possibly, maybe in terms of trying to compare channels, there may well be in terms of setting up a new branch for example, staffing a new branch. And that sort of building up from scratch compared to putting a new product onto an existing Internet bank and so on. There may well be a cost-benefit that we have in association with those, comparing all the different channels. But once the channel is there, all we really need to do is actually develop the products that are available through that channel, or then just work on the content of the site and the usability; the backbone of it. Nothing much will be changing on it. The majority for example of our Internet sites all come to talk of the legacy systems that we have; all these things are written and examined; all we do is put interfaces between them. So our back-end functionality remains the same. So all our channels effectively feed in to the same kind of back-end system irrespective. One area where, in terms of costs, it will probably come in is that we have a kind of charging rate for each developer or each member of staff in each different area that we use to calculate our manpower rates or manpower costs throughout the year for a project; so if I have to work 100 days on a project, I will be charged out the cost to the project for the technology costs; as well as the cost of the hardware, there will be the needed manpower cost which will be charged at the day rate. Now, that day rate is something that changes year on year, so, that does incorporate the number of staff that we currently have; so obviously an increase in the amount of staff will likely mean that the day rate will probably go up. It also covers support costs; so the more systems we have, the amount that we charge back to the business will kind of potentially go up. So we do have a kind of a measure there that we can draw on in terms of the number of staff and location and various things like that; we usually calculate a man-day rate.
27. **GS – Right, I see. Now going back to the overall setup of the project and the process of going through a project, from conception to completion, I'd like to discuss a few things about the role of the Finance function and how this is involved. What I mean is that in several cases – and this actually depends on the organisation – you have the sort of 'silo' approach where Finance plays a role of a bottleneck or filter, and in several other cases, you have it working as a support function, rather than as a part of a linear system where you have to go through Finance to move on, and if they say 'No' then you have to go back and redesign, and so on. And there are some issues of power there as well. Would you like to comment on that?**
28. DM – Right. Like what we were speaking about before, we have seeds of ideas for projects and maybe we will end up seeing 100 projects or 100 ideas; so, for example, we might be split into areas where we have a Group function, we have what we all consider a Retail function and we have a Corporate function. So, each would have their own ideas about what the projects they do should be doing. So, we would probably trim these 100 projects down to what we consider a manageable amount, or we would do a very high level CBA on them, or see which ones are of strategic benefit and so on. So we take a number of projects, do a cost-benefit on them – mostly {focusing} on the costs – and at that stage, each of these areas will probably make a presentation to our Executive at a very high level, where they say "this is our problem of work; this is what we think it's going to cost,



and this is what we think the benefits are going to be". And invariably they come back with "we don't have that amount of money. Drop some projects. We're not going to get enough benefit, so we need more benefit from that". So it goes in a bit of a cycle here...

29. **GS – Is this argumentation on a quantitative basis? Is it on a financial basis? I mean do these people work through the NPV and say "this is the NPV or IRR of it" and then the Exec says "we need more than that"? Or is it a mixed approach where you hit both the strategic benefits and the financial ones?**
30. DM – It is more of a mixed approach. I think it all depends on the area doing the presentation and how much they have been willing to prepare. As it is the case, the more definite you are you want to do it, the more preparation you're going to do in order to get it through. You will probably get more information or more facts in if you think you're more unlikely to get it through, thinking that you have a bit more background to actually justify why you actually want to do this.
31. **GS – I see. Once it is assumed that a project is approved, and the Board decides that "yes, these are acceptable estimated costs and estimated benefits; go on for that." What is the process after that? I am speaking more in terms of accountability; one thing that is commonly referred to by people I've been talking to is the ownership of benefits. Do you go down that route?**
32. DM – We do. Once you get a high level agreement for it, what invariably tends to happen is that each one of the areas – retail or corporate – will get a high level agreement to spend, say, 20m each on technology investment to deliver the business benefit to the business areas. So, each area will then go away and literally start again. They will say "OK. Now we've got 20m pounds; what can we do with it?" Invariably, some of the ideas that were initially in, get dropped out and some new ideas come in; and they're starting to fashion a programme of work for that area. Again at a high level, but perhaps going more into detail; and they start dividing up that 20m pounds to all the various projects; probably they split it into three different types of revenue: say, capital revenue that we view in order to buy our actual technical hardware – UNIX boxes or whatever, licence fees for buying packages or actually buying the packages. Also we have capital for consultancy, so we buy consultancy; and then we have revenue, which is effectively the manpower, or is going to be associated with it. So, each of our projects, we have to split to these three costs as best as we can.
33. **GS – Right. And once you reach the stage where there is some kind of change request, does that go back to Finance to approve?**
34. DM – Yes. Once we've actually set this in our business area and we've agreed what the split of money is or what we think the project is going to be doing, again we haven't got anywhere near the detail of what exactly we're going to be doing yet. It's still at a kind of a high level. We then have a process that we call "*Project Authorisation*", a process whereby we go in and actually put in the detail of the capital revenue and the manpower revenue, and the manpower revenue is actually broken down in terms of the types of developers we need or the various types of technology that we have to engage, in order to try and get a manpower forecast for the year going on. And that also needs to have a certain degree of benefit, in wordy terms; what is either going to be the financial benefit or .... You know, just words which kind of go around like "we're going to make money through additional customers" or things like that. And again, that has to go through an approval process and until that has been through, effectively you cannot do any work on it. Once that has been approved, then, for example, me as a project manager has control of that budget; it's mine to manage from then on. I have a sponsor from the business area and I also have an owner from the business area where I have to

report into, on an ongoing basis to tell him how I am spending their money and when we are going to be able to actually deliver the project. Are we going to deliver in the timescale they require etc. It's only then that we actually get into some kind of project definition; what is it that we're actually trying to do, and actually start going through the lifecycle of the project. Invariably, what happens quite often is that you define your project, you set your terms of reference, you do your initial analysis to find out in some cases that "we've been allocated 1m pounds but it is actually going to cost us 2m pounds". So, eventually we have to go to Change Control to go back to Finance and say "well, our project estimate was for 1m pounds; now we realised it is going to cost 2m pounds". Invariably we will have to go and do our cost-benefit again; and things that can happen if the cost-benefit is just not there, there's a possibility that we cancel the project and not go any further or try and look at alternatives on what we can do with that money we've been allocated. And this Change Control process goes all the way through the iteration of the project. It's a continuous review; especially another typical thing is that from this million pounds you've been allocated, that this 500K is for capital expenditure and the other 500K is going to be manpower; you find that your project costs overall are going to still remain within 1m pounds, but you actually need 100K only for your capital expenditures and 200K for your manpower. That still requires a Change Control within, to actually change your type of expenditure.

35. **GS – Right; going into the investment appraisal processes themselves and the techniques, if you like, you're an IT person, you're dealing with technology, you're aware of things like the benefits of IT that are not actually being accurately represented by the financial techniques that you use. The ones that are being used at the Royal Bank, as far as I am aware, are the traditional ones like the NPVs and the IRRs and so on. How do you view that? Are you looking into changing that into something that is more specific to IT? Or do you feel that the existing financial methods can accommodate what you're trying to measure in terms of IT benefits?**
36. **DM – At the moment, we seem to manage; one of the things we use to do is that we use to do a specific charge back to the business for IT costs; not just the actual kind of costs of development but the actual support costs in terms of the business area we're using the machine; the amount of storage that an [business] area actually uses on a specific machine; I guess MIPS and storage are probably the two biggest things that we pay for, and probably the floor space that we use; so, I guess a business area has a much better idea of what they are actually spending on their IT and so, for example, the MIS area are often dealing with millions and millions of rows of data and information, often joining lots of tables together, so they have some database queries that can go on for days and days. At the moment, they don't see the costs; it just happens; and the viewpoint is that the machines are there; they have new processes in, therefore use them. But there is an actual cost there; it might be 1000 pounds to actually run the queries over a 2-3 day period, in terms of the resources that it is actually using-up. But we're completely unaware of the cost of that at the moment. And we tend not to charge back to them. I think, the reason behind that is that the cost of maintaining such measures was more... you know, it's a huge overhead for us compared to the benefit of actually reporting those costs.**
37. **GS – Right. I'd like to stick for a while to the techniques and the like: things like measuring intangible benefits – well, not exactly intangibles, but things that can lead to tangible benefits but are primarily intangible – things like rationalisation of systems or, just as you mentioned, relocation of staff that is being taken away from the trivial day to day business-as-usual tasks and allocated somewhere else; in terms of the actual techniques that you use, are you looking into something more sophisticated for measurement?**

38. DM – No. An exercise that we do at the moment is that we have two databases that are very similar. We used to have two different users; so we have a benefit for that whereby we can actually combine them into one database: the benefit that we are going to see is in support costs and the potential ongoing development costs in that you will only have to develop changes to one system rather than two. That is the kind of level that these are looked at. Nothing more than that. I think it would be very useful if there are other things that we could measure but the management is fairly happy with just being able to do that. And potentially the savings associated with this are probably higher than they possibly are, in order to justify the cost-benefit.
39. **GS – Right. There is a number of academic – at the moment – propositions for different models used in IT and some of them have been used for this kind of infrastructure projects; there is actually a whole host of such methods – I can actually send you a document I have on that. So, you're not looking into having some kind of a separate methodology for looking into the IT investment projects as opposed to other capital investment projects? Is this what you're saying? That you don't have something specific for IT?**
40. DM – No; certainly not that I am aware of and certainly it's not coming down to the project level. Whether it actually happens at a higher programme level, or even higher, at an executive level, I'm not too sure; I suspect not.
41. **GS – Regarding the issue of knowledge management (KM), and KM is something that has different definitions; so, I'm not talking about information management but rather about sharing knowledge that is accrued through, for example, project implementation. First of all, going back to the issue of reporting, do you see any value at all in somehow more formally reporting on KM benefits or knowledge-related benefits that are accrued from Internet banking projects? For example, knowledge that you obtain from being engaged into an Internet banking project or, more widely, into an IT project, you get some better understanding and better knowledge about IT implementation in the organisational setting; you have things like the rationalisation of systems that I mentioned before; you have, in a way, better quality of information about your customers who are self-serving and so on. Are these benefits looked into at all?**
42. DM – I guess they're not specifically looked into, but what we tend to do – or what we have started doing – is that we probably have a fairly good history of all the projects that we've done or carried out over the years now: who were the people associated with these projects; also we have a concept of System Owners and System Experts, and we have someone we call Systems Analyst where we have all our systems and all our interfaces that we currently have; and we have levels of people on those, what type of technology they are in, and who the actual experts are, and who the knowledgeable people are on those systems, which is visible to everybody; immediately, if, say, I want to do a project on Internet banking, and I don't have a clue about Internet banking, I go there to say "well, what Internet banking projects do we have? Who are the people I should be talking to that would be able to help me?" and develop through these. We have the ability to share project plans, implementation plans and the like.
43. **GS – I see; do you think there is any value in more formally reporting on what is known in both the industry and the literature as "knowledge assets"? Do you see any value in reporting these through different accounting mechanisms or other mechanisms to report these to the market, or even internally, in terms of assigning value to them?**



44. DM – I guess internally it could well be a useful thing, because, again, because we have a staff attrition rate, a common thing that we may have is that we may have a balancing of our workforce between our permanent staff and contract staff. So, you could well have a member of contract staff that has developed 2-3 years knowledge in a particular system within the bank and it would be a useful thing to be able to measure the cost of them leaving or the cost of having to replace them or the cost of sharing the knowledge that they actually have. So, I definitely *do* see that we've gone from an 80% contract – 20% development up to now almost the other way round. We're on 80% [development] now. Some of these contract staff has been there for quite some time. So, effectively we should know which of this knowledge is actually going to leave the bank; just walk out. And now there's a quite big recruitment campaign on to get new staff in, who may have the required competencies to be a developer or a project manager, but they don't necessarily have the knowledge of systems of RBS. So, you could argue that there is going to be an extra cost for one person doing one project or somebody asked to do exactly the same project; and I think that could well be an interesting thing, if that was possible to measure; it would be a useful thing to be able to measure the value and the cost of workforce from a knowledge point of view. But there's absolutely nothing formal or informal in place for that, other than trusting staff to keep some kind of skills database of their own knowledge up to date, so that you can access it. Other than that, I know for a fact that if all our similar knowledge kind of walked out the door, nobody actively looks at this database to say "oh, hold on a second; we don't have anyone here with that set of skills".
45. **GS – The last thing I wanted to speak about relates to the investment appraisal process again; and this is relating to the IT, which is by nature focused on the long term rather than the short term. And I'd like to discuss the issue of short termism, in terms of delivering benefits, and that comes down to the fact that, for example, long term benefits don't really engage individuals in the long term, in the sense that he will be inclined to base his or her case on the shorter term benefits; because these are the ones that he or she is going to be remunerated on. Is that a problem that you're facing and how are you dealing with it? I am talking mainly about IT, because it is the main long-term related one.**
46. DM – Right. To a certain degree, problems are the other way around, in that I guess our Executive would like to see the benefits for the costs that they go through on a year, returned in that same year if possible. That, I think, would be their ideal approach. If they saw something like a two-year plan of work, they would focus immediately on where they are going to get the benefit in the first year. What are the things they're going to get the benefit from; and if there's nothing they're going to get benefit on, in the first year, what they would automatically do is say "well, we're going to defer doing that until the second year".
47. **GS – I see. So, there is this short termism coming from above rather than from middle management.**
48. DM – Certainly, in the current climate, I would say yes.
49. **GS – Yes, I understand that it is an issue of the economic lifecycle.**
50. DM – Yes, totally. Whereas from an IT point of view, we probably have – certainly when we're doing brand new developments – that the upfront cost is going to be very very high; Internet banking is a classic. If you were starting an Internet bank from scratch, your initial costs are going to be huge, and there is no way that you're going to be able to recover them within a year. So, they're actually more difficult projects to plan. I guess, one of the things we tend to do, some way to try and get over this, is breaking down this kind of projects into smaller profitable chunks. Then



you can say "well, this is where we're going to get benefit from this part. But it's difficult to justify doing the second part of that at the same time. Let's see; we can do the first part, and maybe if that goes well, and the fact that this step is taking us someplace, then the benefit of actually doing the second part falls in place". Even though we have the view to follow for the future, we always are coming back and say "we got that year out of the way. OK, let's have a look at what the problem was", and some things just automatically fall away; because the benefit that we expected by doing the initial part, is no longer there for them. And there is a definite 80-20 rule in place in a lot of cases. So, you would think it would be the other way with short-termism and in terms of people trying to get the benefits and the costs in, but it really is the other way about: a lot of people see a longer view of what they want to do.

51. **GS – OK. That kind of takes us back to the benefits ownership; and what I am actually investigating there is that benefits ownership is something that tends to be short term, in the sense that no one would like to own an intangible benefit or a benefit that placed at the very long term. Doesn't that function as an impediment to taking account of the long-term benefits?**
52. DM – Possibly. In terms of that we've never been great innovators, we've never been the first people who jump on any kind of bandwagon. We're actually letting them toddle along a bit and see what actually happens before we tend to get involved with things. In terms of Internet banking, there were many other Internet banks before we actually came in. I guess our long-term view is there, that we wait to see how other things in the market actually play out before we actually make a move, or make some kind of commitment; and maybe things become easier to measure because we can go by the cases of success of other companies in those particular areas. Some of the things we have done have been two or three years long, and they have had an ultimate goal at the end of them. But all the way along, there always have been this kind of smaller pieces of work that have been driving them and getting the benefit upfront. It means that you can actually go along and do the longer term.
53. **GS – Right. OK. I won't keep you for much longer. Last thing I wanted to ask you is, would there be any type of documentation that you would be able to provide to me? I am treating this interview and whatever you may send to me in a fully confidential manner. So there shouldn't be a problem of confidentiality there at all? So, would there be any kind of documentation on the things that we have talked about, like investment appraisal processes for IT projects, or any of the templates that you use for any type of approvals or decisions on IT, that you would be able to provide?**
54. DM – Yes, I think there certainly should be a couple of templates or documents I can find. It would be worthwhile to have a look and see what I do find {laugh}.
55. **GS – That would be great. I can actually follow up with an email as a reminder.**
56. DM – I think there certainly are things like project approval forms etc. that can certainly give you an indication of the cost-benefit process. I can have a look and see what we have on measures, or I can send you a project lifecycle document.
57. **GS – Yes, that would be great. The other question I would like to ask you: we've been talking for more or less an hour now about my research; do you think that there are any areas that I am missing out and that I should be looking into, in terms of what I am researching? Do you have any observations there?**

58. DM – What maybe strikes me, is not areas that you're missing out but just that there's areas that we don't look at, or certainly I am not aware that we're looking at. I think that we have a very simplistic view of what we do and there's no kind of "rocket science" involved where possibly there should be. And given that, it's probably harder and harder to justify projects. Maybe we should be more scientific about how we're actually doing that. And we should have some tangible measurements of the intangibles and everything that goes along with the project. To a certain degree it may be easier, because at the minute, there's so much of sticking our finger in the air and having a guess, or looking at previous projects that we've done before and seeing how long they took, how much they actually cost etc. At the moment, for a lot of the project lifecycle, we have lots of pro-formas and a lot of processes that we have to follow, in order to do things. Why can't we actually do things here as well when it comes to actually working it out in terms of cost-benefits and the measurements that actually go along with these? It may make things a lot easier for us, when we were actually having our initial discussion about when they're trying to figure out which projects they actually do, [it would be good if] we have a series of measurements that we can easily carry out, or things that we can look at, to say "well, we go for this one".
59. **GS – Do you think that this happens - you've just mentioned some kind of a more simplistic approach than the one that you would advocate for – because people do not believe that it is worthwhile having a more sophisticated approach? Or is it that people think that there is a lack of resource for use in developing some new ways of measurement?**
60. DM – Potentially, there may be a view that doing measurements like that might become an overhead to a certain degree, if to keep these measurements going turns out to be some type of job creation: you have more people doing the measurement that you've actually got doing the actual work; there may be a concern there. I think time is a factor. Ever since I've known there's always a scramble at the end of the year to actually figure out what our budgets are and was always concerned that you're always panicking when you're actually starting rocketing your project that you've actually have asked enough money for. Invariably, we always have to try and use the money and then just go and try to do that project in that amount of time; I don't know whether it's lack of planning; we know the budget that comes in every single year, but we seem to be as badly prepared every single year. So, I don't understand it. We know that we're going to finish our projects; we know that we're going to have all that people with nothing to do for a period of time, unless we actually go on and get a programme of work together. So, I don't know why we aren't smarter and cleverer in doing that. I don't know why we have the year on year cycle of it; I don't know why it can't be a running programme of work: that we have a whole pile of projects out there, or there's someone who is looking at all the projects that we can possibly do and you come along, you're freed up and you just take the next project that is available, or a project that fits within the time gap that you have or whatever; rather than this stop-start approach that we actually do. I don't know why we don't have a group of people who are actually looking at initiating projects, or getting projects to the initiation stage; this could be a good thing to do. Like, 'this is how much it's going to cost, and the benefits will be [derived] with proper measurements.
61. **GS – I see. When I send you this reminder email, I can send you this document that I've developed as part of my research, and there is a table there with some of the methods for IT appraisal that exist in the literature; you might be interested in having a look. There is not much detail there, but you might just get an idea about what they deal with; there are some portfolio methods where you use grids and you build in the financials and some other strategic measures and so on; maybe you would be interested in that.**

62. DM – Yes, that sounds useful.
63. **GS – And of course, once you get it, feel free to get back to me to ask more details.**
64. DM – It will be useful because it may kind of trigger some more information that I can send of to you. I hope that this discussion was useful.
65. **GS – Yes, absolutely. Just before I leave you: do you think there would be anyone else that it would be useful to contact regarding these aspects we've been talking about?**
66. DM – Well, what people have you been speaking to from RBS? You had IJ...
67. **GS – Yes, and Marion from Investment Appraisal, some senior people as well; quite a number. What I am asking you there is whether there is someone who pops into mind and you think "maybe this guy knows better".**
68. DM – I can't think of anyone at the moment but I will have a think and let you know.
69. **GS – Alright. Thanks very much for your time; sorry for taking just a bit longer. It was very nice talking to you; we'll be in touch.**

## **2. INTELLIGENT FINANCE**



## 2.1. Interview, 4/02/2003

1. **GS – I'd like just to start by saying a few things about who I am and where I come from, so that you have a better understanding of my background. I am originally an Electronic Engineer. I graduated in Greece and I've worked there in Telecoms for about 3 years; then I took an MBA in Edinburgh University; my dissertation was again about the utilities and deregulation. I am currently doing my PhD, and my PhD's main subject is technology management. And – I guess you had a chance to look at my draft - I am looking into investment appraisal for Internet banking specifically; generally on IT but I am focusing specifically on Internet banking and financial services. And there are a few reasons why I am doing this PhD; the one thing is that it's really fascinating how technology has shaped financial services in the past decade. There are around a number of propositions as well about the changing nature of financial services through the prevalence of ICTs and all that lot. So this is it. Would you like to tell me a few things about yourself?**
2. **MK – Yes, certainly. I'm the Finance Director at Intelligent Finance. I've worked in the financial services industry now for 13 years; I joined Halifax in 1990, and I worked initially in commercial property financing, with responsibility for large-scale structured finance, PFI financing, corporate finance, including mergers and acquisitions, and then Business Strategy work; I moved to Intelligent Finance at the time of its genesis in 1999 and have been here ever since. I was the second employee after the founder Jim Spowart. My background, I am a chartered accountant by background; I have an MBA from Cranfield University, and prior to joining the Halifax, I worked in the development industry for a plc.**
3. **GS – Alright. I would like to start from just a few questions on the beginning of setting up IF and the rationale behind it, and the decision-making for it.**
4. **MK – OK. It's difficult now, in 2003, to remember the halcyon days of the Internet boom really. During 1998-99 it was clear that the emergence of new Internet-based financial services organisations were starting to ask questions of the existing branded businesses in financial services, particularly those dealing with retail customers.**
5. **Along with a whole range of other financial institutions Halifax Plc - as was then, prior to the merger with BoS – was looking at opportunities to develop a new Internet banking business. There was a concern that the Halifax core business, which primarily branch and introducer-based, was becoming a bit stagnant, looking as though there was a lack of fresh ideas, and, of course, one of the major issues for a public company is to be seen as a growth stock. That led to a whole range of work done internally and with the help of external consulting firms, to identify how some of the issues that had been raised by people such as Egg could be dealt with, and was there a way of saying 'well, Halifax may be a brand that is in decline, but there's a potential here for something fresh, different and innovative'.**
6. **During the summer of 1999, the bones of that idea started to come together with what was then codenamed Greenfield.com. And the initial thought as to who the CEO would be was pulled together, Jim Spowart, then CEO of Standard Life Bank had established a very short but successful record in terms of establishing Standard Life Bank as a direct provider, cutting out the branch networks. Jim was identified as the potential CEO to kick-off this business. That came to a head in October 1999 – probably, hindsight tells us, just about the end of the Internet boom; it was probably just about when people started to consider whether the Internet really was something that added value, or whether it was just really another distribution channel, that *may* add value over the longer term, but certainly didn't add value just by being there.**

7. What we started with was really – not a clean sheet of paper but – a business case that made sense and had been accepted at the higher level by the Halifax Board, as something they wanted to invest in; and what we then had to do was say 'OK; what are the real key things about this business, that are going to differentiate it, apart from that it's going to be a direct bank?' Offset banking had been a key piece of the discussion – that's the offset of asset and liability balances, minimising, in most cases the amount of interest the consumer pays, but also reducing the amount of interest available for the bank. So, of course, the pressure was very much on, in terms of making this a low-cost delivery business.
8. The differentiating factor of this business is the offset product; and we're clear about that, and it is a good job it is the differentiating factor, because otherwise, I think as we now look at this, all of the established banking organisations have reasonably functional Internet sites, with their own branding, able to offer at least current account banking – in many cases a whole range of other products, from personal loans, credit cards and, in some cases, even mortgage applications. What we have here is Internet banking, supported by a telephone banking infrastructure as well, but the key differentiator is the fact that all 5 products are together in an offset structure, and still there is nobody else with the level of sophistication that we have in terms of the product set.
9. In terms of the dynamics of that, obviously what we *have* seen is the whole rationale of separately branded Internet banking ventures is being called into question. You only have to look at Wingspan and all those sort of organisations that grew up in the States, where there's more of a federal banking structure and there's less brand presence over there; apart from the one or two very big banks, most banks in the States are very small, whereas 90% of the people in the high street could probably name the big 4 banks in the UK.
10. So, I think you *do* have this issue of, 'well, is the whole idea of separately branded Internet direct banking organisations, in hindsight, a valid idea?' And I think that's the challenge for everyone who's in the Internet banking business. Because what we *are* seeing is that consumers want it all. They want the efficiency of the Internet – I prefer to bank on the Internet, I don't go to a branch at all; not exactly not going to a branch but of course there are times particularly if you have got the access to the Internet at work, where you can't really be bothered to switch your PC on; you just want to move some money, so you want to be able to ring people up; but of course it is for a large proportion of customers nice at times to sit down face to face with people for advisory-based products.
11. What we *do* see is that, although we are an Internet bank, people like the Internet for servicing, but many of our actual sales of products come in the end from an advisory-based situation, where they have sat with the mortgage intermediary and discussed their own wants, needs and requirements. We are then able to enable the intermediary through the use of the Web to apply very easily online; through the use of new technology they get very quick credit decisions, but I think it is quite interesting as to what is the rationale really for making money going forward in terms of the amount of return that people expect for an equity investment. If you look at Egg, for instance, it's a good business, good functional website – certainly compared to 3 years ago, the functionality is fabulous. But effectively, they're leading the price down in a commodity-based market; credit cards are nothing if not a commodity. And it is a price-based proposition. And how do you build on top of that, that extra customer value that is going to bring longevity and profitability for the financial institution.
12. So that's where we've come from; many people at the time when IF was set up said 'it doesn't really matter what sort of a bottom line we make; as long as we've

got lots of customers, people will value our stock on the back of that'. When we announced that we were going to make a joint venture deal with BT on WAP banking, the Halifax share price went up 50p. Now, the reality is that WAP banking has ended up being a failure; lots of money spent by a lot of people and it just hasn't taken off: too difficult, too fiddly, why fiddle around with something like this when you can ring somebody up and ask them to do something? It just doesn't work. Maybe 3G will bring that extra functionality. But it has been quite interesting to see that move from people saying 'this is new, exciting, and it's about growth' too, the new corporate reality which is 'it might be new and exciting, but how are you going to make some money out of it?' And that has been quite a sea change; certainly from 1999 to where we are in 2003, when we release our results to the City in about 3 weeks time, through the HBOS results announcement, the analysts are going to be less likely to be impressed by 'oh, you've got all these new customers' and more to be focused upon 'how you're controlling the costs?' and 'how far away from profitability are you?'

13. Now, in terms of that, where we are is that the business is in broad terms operating to the plan that we set out, we *have* generated the sort of volumes of balances that we need to go towards breakeven and we feel that the business is in shape to break even towards the end of this year, 2003. That's all information that's in the City and the common awareness in the City and that's our current position, and that's where we're moving forward. But what we *are* seeing is that the thing that has enabled us to do that is our differentiated proposition; not the fact that Internet delivery is there. It works fabulously well on the Internet; it's very intuitive, it's great to be able to see all your balances in one place; if you go on to our website, if you are a customer, and you see your balances, it's like an aggregation engine in terms of being able to see everything.
14. **GS – Just one thing that you mentioned about the proposition being there and the Internet being the channel; that it does make it look nice on screen. Would you say that this kind of proposition would be valid or viable, if you like, without the relevant IT? Not only the internal IT for the systems that delivers the capability of offsetting these products, but also the IT – security management and all that – to deliver it to the customer.**
15. MK – I think, one of the key things we face is obviously that we've made a substantial investment in IT, driven by 3 things: Firstly, it was a startup business from scratch; secondly, it was done at speed, and speed always costs; and finally, to have any hope to gaining consumer confidence and to gaining regulatory approval in the UK, you have to make sure that your security and your underlying integrity and robustness of your systems is such, that failure is kept to a minimum.
16. As a new business, we have gained *some* benefit from the fact that we've been under the Halifax umbrella; but, at times it's useful for us to say 'look: we're fresh and new and different, we're not like the Halifax'. And the Halifax has reinvented itself; it's very much a sales-focused, customer-focused organisation, increasingly looking at direct channels to market, increasingly giving better service over the Internet for its customers, but dealing with a broad range of customers across the whole socio-economic spectrum of the UK; we are more of an upmarket banking proposition, with a more financially sophisticated and more financially aware consumer who can see and take advantage of the benefit of offset. Therefore, it's useful at times to be able to position yourself as separate from the Halifax, but then it's also useful when people think 'do I trust these people?' There's always the issue, with any Internet business, of 'do I feel comfortable sending my money to these people? Will I be able to see it? Will it turn out? Will it get lost?'
17. We are very heavily regulated as a business; we had a web outage in October. We had a problem with some data management issues, which caused our web



functionality to go down intermittently for a 5-day period. We were still able to deal with telephone calls, but we advised our regulators straight away and kept them up to date on an ongoing basis, because, increasingly, the regulator (the FSA) is now saying 'our role is not just around making sure that the capital strength of the bank is sufficient; our role also focuses on making sure that customers are being adequately looked after, in terms of customer service and availability of services'. So, there is a huge premium that has to be paid and covered by all financial services institutions, in terms of the commitment to Internet security and the robustness of the operating systems; in order that we can be online at all times.

18. **GS – I would like just to insist on that and ask you, would you say that this type of differentiated service would be as easy to build on the existing legacy systems of Halifax than starting from a new system?**
19. MK – I think the reason why IF was setup as a separate business was that Halifax as an organisation was fairly static. It has had quite a lot of changes over the last 3 years, but historically Halifax had become moribund. They had become bogged down in a whole range of non-growth activities; that business has now re-invented itself and it's very growth-focused. But what is clear in any large organisation is that it is very difficult to take people out of that organisation and to say 'right; OK; you've been doing well; you followed the process of this, you've done that; you followed the book for 20 years of your career. Now you have to become fresh and innovative and not worry about what was happening back at where you all used to work.' That generally doesn't work, and so IF was setup as a new brand, a new management team, new location – because Edinburgh obviously wasn't HBOS in those days – Edinburgh was 200 miles from Halifax; and were told very much to get on and build the business from scratch as quickly as possible.
20. Again, I think, you've got to remember the times we were in. Everybody saw that this was fresh, innovative, new thinking, radical. And I don't think a business of this complexity would have been delivered by the Halifax doing it itself; because it would have become mired in bureaucracy, in process, in 'oh, we've got conflicting priorities' in business as usual, and it would just never have actually been delivered, because this was a hugely complex IT project to deliver.
21. Five banking products interlinked; with the product engines at the back, and at the front end you have interlinked web and telephone capacity, and then holding the two end pieces together you have a mid tier, which is very much taking some of the product information from what are really legacy systems – just very straightforward engines – and being able to give the functionality and richness to the information that the web can provide, and telephony centre contact can provide. So, it's a huge and complex task there; and at the same time while that was being built, we had to recruit 2000 people to actually be able to administer and run this.
22. I think there is often a thought process that 'oh surely you can get this done, and it's all done by a computer, and you don't have to have all these people dealing with things'. Maybe you can do that; and I think that's the challenge once the business is up and going, to sort of say 'well, what of all this can we really automate, and really start to take people out of the equation?' At what stage can we start to say 'do we really want to service people on the telephone? Do we just want them to come by the web?' At what stage with mass acceptance of the Internet will people be quite happy doing it all themselves? They don't want to talk to anybody; they don't need to talk to anybody.
23. One of the issues you do face in a large organisation is that... HBOS is a business worth – prior to the recent stock market crash – 30bn pounds. There isn't a great deal of point setting up a business that is going to make 20m of profit a year. Because you can do this by doing some slight rephasing to your current costings



within the large business. So, you have to actually say 'right. Our aspiration here is to have a large meaningful business. And I think, when you actually look at some of the other Internet businesses that have been set up by other banking organisations, I think what was lacking there was 'well, why are we doing this? Are we doing this as a testing ground for something that we're going to apply into the big brand, so, effectively using it as a test site?' And if it gets things in, then that's great; but if it doesn't, it's a cost of testing things, and we'll take our technology lessons and apply them to the big brand. Or are we actually saying 'we are committed to setting up a new standalone business that has a future, that is independent from the large organisation?' I don't know what the answer is. All I know is that this business is being built to a size that it can – provided that we keep growing as we are – be a large, very relevant, part of the HBOS group. Whereas some of the other Internet businesses, which are separately branded really look as though they're just sort of tests; and where ultimately they're going to take those businesses?

24. **GS – Right. That's really interesting. I wanted to move on to things about decision-making for IT, and first of all, I'd like to speak about more or less the processes of approvals for IT. I've spoken to quite many of the banks and one of the issues there is the process of approvals for projects in general, whereby you either have some kind of a silo approach, or you have a more interleaved or organic kind of way. So, I'd like to talk about things like the dynamics of expert groups there and so on.**
25. **MK – IT projects are probably the most difficult situations in the organisation. This was an IT business for the first 2 years of its life; probably one of the largest IT development projects in Europe, in terms of getting something from a standing start to go. Where we sit now is that we are a separate banking business. But all of our processing capacity sits within the HBOS central IT sites, which are based down in Yorkshire. So all the boxes sit there; we control some of the applications that we have, and HBOS run a whole range of other things for us, including communications and the Internet security; it is pointless having different security to Halifax, for instance; we all sit behind the same firewall. So, the majority of our IT, in fact our own applications, are managed here, but our infrastructure is managed by HBOS centrally and they charge us for it.**
26. **One of the issues that has come to the fore over the past year, as we've started to mature away from 'let's just get this thing launched' to 'OK, we know there's all sorts of things to do; now we've got to prioritise what we're doing and got to work with other people in terms of doing that'. The way it works is that we work – particularly JM, our IT Director - with her colleagues on the Group side to control and manage our level of capacity that we take from the HBOS central technology, to make sure that we have capacity for the changes that we require, but also where they're making changes, we make changes here that fit in with what they need to do. Within our own IT projects we have thought about taking a silo approach and giving each major departmental area an element of budget, but we've moved away from that; we don't feel that works; we've got a very integrated business. All of the products integrate together, the front office integrates with the back office, and, of course, we've got offset over it all. And we have one credit process; so it doesn't matter if you come in for a mortgage or a personal loan. You still have to go through the same credit process. So, we do have quite a difficulty in terms of prioritising the whole range of work. Obviously, we have the essential housekeeping work that needs to be done to keep us going - upgrades to networks – we have the essential housekeeping on our own applications and the technology upgrades that we have to make as manufacturers say that they're no longer supporting various elements of our system, and then – on top of that – we have a process of smaller items dealt via change requests, and larger items that end up becoming projects. Within that process we have an overall budget for both, and we**

also have a project plan which is starting to stretch out for 2 years and will soon be stretching out to 3 years, on which we are prioritising a whole range of IT changes - primarily business-driven IT changes.

27. There are a range of issues; but the business and the IT area are working together to say 'Well, OK; we need to scope up these pieces of work; we need to look at how much work is going to be involved, and the likely costs; and also look at the benefits that may flow from that. And also, we need to start slotting them in, in terms of priorities and in terms of our overall business plan.' That is not a simple piece of work. We have just about weeded out the pet projects, the ones where people think it's a good idea, but actually they think it's a good idea because they like the idea, against whether it is actually going to make us any money. We've got a full project pipeline for this year, in terms of what we think is going to get done and which releases it's going to drop into within the system; however, what we have now to deal with, we have a new CEO, and as all new CEOs, he has a slightly different approach and his priorities don't necessarily tie-in with the previous CEO's priorities. And now we have to say 'well OK; if we put this in, what's going to have to come out or move backwards?' And that is a constant iteration.
28. The way we manage that process is that we have what we call an overall steering group; and that is the senior executive members of this business chaired by the CEO, but with the Head of Operations, Head of Finance, Head of Technology, Head of Projects, and we have an overview there in terms of where the business is going and where we see the priorities. So that is setting the roadmap for where we want to go. Below that, we have a project prioritisation group, on which a number of the senior people sit, but also have more technology and business people involved, which looks at the individual projects that require to be done to get us to where we want to go.
29. **GS – Is this just IT projects or the overall portfolio?**
30. MK – Well, we're actually bringing in business projects. It has been primarily IT projects, mainly because IT is absolutely fundamental to this business. There are very few projects that we don't have some sort of touch on our IT structure. And what we have – because we have a very complex system with 5 products plus offsetting plus the web and telephone, all integrated together is that we can't actually go in and say 'why don't we just change this bit of scripting here? It will be fine'. So, projects are reviewed at the project prioritisation group where a business case is made with the benefits, the timing of these benefits, the costs and timing of actually doing the development from an IT perspective, but also the people issues that come into that, in terms of retraining etc. And we do increasingly have a very clear roadmap in terms of what the benefits are, primarily in terms of productivity, but also in income growth, that are going to drive through from the projects that we're supporting. Below that, we have a project management team that is looking at prioritising a whole range of change requests, which tend to get done in smaller releases throughout the year. You know, we need to change *this* parameter in the credit area, *this* parameter in terms of our mortgage applications, it's not a big change, it's not going to cost much to do, but it all needs to be scheduled in, and it all needs to take cognisance of what is actually happening on the major projects. What we do often have is a bit of conflict in terms of, if something is approved for change by the Credit committee, does that change come in separately, or does it have to be prioritised with everything else? And in a fairly standard British way, we sort of compromise on credit changes in that it is the only area that has a small team that deals with specific credit-related points. We have a small team there, who can make changes, but only to the offer engine, if there are changes that affect the rest of the bank, then it has to be prioritised and we have to understand the risks and the costs and the benefits in the same way.

31. **GS – In terms of people who get involved in the overall decision-making in project approvals and so on, I guess these people come from all different kinds of backgrounds; different kinds of expertise. Is there a specific role there for, say, Finance people, IT people and so on? Where I'm sort of leading this discussion – because my next question is on investment appraisal processes – is where does Finance come in and what is its role.**
32. MK – OK; all business cases should either have a business owner or an IT owner, depending on the nature of the case. And it is the responsibility of the owner to pull together a financial case for why we should do this piece of work. That will cover the income or cost-saving benefits, but also almost look at the actual costs and timings of actually doing the change. We have a template, which looks at both financial benefits and costs and intangible benefits, that works primarily on a cash flow basis. The Finance team support that, mainly on an ad hoc basis; so as cases come in and need to have a financial review, then one of the financial team is allocated to a particular project or case and works with the business or IT owner, to work up the numbers, to make sure we're looking at the correct hurdle rates, to make sure that the cash flow sensitivities are done in an appropriate manner, and that the templates are followed. What we are finding is with the amount of work, we have an issue as to whether we should actually say 'certain accountants, their work is to support project appraisals as against on an ad hoc basis'.
33. **GS – You mentioned they are making sure that the templates are followed. My next question is actually; you have been using this template for how long?**
34. MK – It's a constantly evolving thing; but we've been using a template for just over a year.
35. **GS – Just to go into some of the benefits, the long-term benefits of IT and so on. What I'd like to ask you there is: Which were the most important unanticipated benefits? Or even unanticipated costs that you were faced with?**
36. MK – What we do tend to find about most projects – what we have found to date – is that we're usually underestimating the costs, and we're not yet overestimating the benefits; but that's because we have so many big things to do; we're a new business. And although our business works well, like in any new system, there's a whole range of improvements that need to be done to it as it beds down. But we do continually struggle to get the cost of dealing with the complexity of development buttoned down; we find that difficult to analyse. In terms of the benefits coming out, undoubtedly we had projects where hindsight tells us and our post project review tells us that we have had the benefits; but they are things that are historical; they've gone before we actually got ourselves working correctly with the template. We went through development, and then there were one or two pet projects, which shouldn't have really been done, but they were; and we thought 'why did we really do that?' Where we are now is that what we're seeing is that, as we do pieces of work particularly around system efficiency, we often get changes in operational efficiency in terms of numbers of people, greater than we actually thought. And that's mainly because of our immaturity as a business. We're not an established business. It's very easy in an established business to say 'this process works in this way; it requires that many people, that many hours a day to do this'. We're a business that has been growing rapidly in the two years since launch; so, we're not yet in a steady state environment, because our number of applications processed daily has gone up steadily over the past 2 years. So, we make an estimate of the benefits that will come out of this.



37. What we do find is that by making the system easier to use or quicker to use, that we actually end up taking more benefit than we thought we would in terms of savings on people.
38. It is still early days; there are obviously some large projects, which are now just about being delivered and it will be very interesting to see if we *have* estimated the benefits correctly. We have been quite aggressive in terms of saying 'we must see return on this money very quickly' in terms of people coming out. Most of our benefits are either from improved sales of products, which is obviously relatively easy to measure, or it's actually in terms of cost savings and the way we have managed so far to impose the cost savings is that we just take the complement of staff away from that particular area and say 'well, we don't expect you to need the staff that you currently have in your plan, so if you've got 40 staff at this moment, and you're going to double the amount of business you're doing, you still have 40 staff'.
39. Now, we've got a whole range of benefits, which are not coming necessarily from the improvements in the system. As a new business, obviously, our staff get more efficient month by month because they're more experienced. And again, we don't have that stability that large established organisations have, where 90% of the staff have been doing this job for 5 years, and know exactly what to do, and you've only got a small number of new starters at anyone time. At this time last year, our average staff members have worked for us 6 months. This time this year, our average staff have worked for us for about 15 months. So, you know, they've actually got that extra learning in terms of their own jobs, in terms of what they do; and people generally tend to do better just from natural learning.
40. **GS – You talked about intangible benefits and the measurement of things in terms of a cost-benefit basis. In terms of measuring intangible benefits, are you actually talking about attaching a tangible proxy that comes from an intangible benefit? Or is it some other type of appraisal?**
41. MK – Most of our intangible benefits revolve around what we think is going to happen to customer service, and of course we believe we will be able to measure that by actually saying 'if our customer retention improves, our closures of accounts improve, if our customer complaints fall, we can measure that, because we know that people are dealing with these issues. So far, we've not been in a steady state to enable us to measure that, to see that clear cause and effect. To say 'customer complaints are running at whatever; say 50 per 10000. We're going to integrate this new process and that should drop it to 40'. That's the hypothesis; and we will be able to measure that, going forward. But at the moment, where we've been is that 'we know this doesn't work, because we're getting lots of customer complaints about it, we're going to change it, and we think this will reduce the customer complaints'. We're just getting better at measuring as we go forward.
42. What also happens is in terms of some of the website changes we've made in terms of navigation and look-and-feel. Again it's a customer service piece where you think 'is there a tangible benefit?' Well, as a customer, yes I think there is a tangible benefit because it gets better than it was. But it's difficult for me to quantify that and say 'what does that mean? Am I going to stay?'
43. Most of our cases work on financial benefits, but the key for us is that we *are* about generating new customers but we will not make the money we want to make, if we just find ourselves churning customers in, and then customers are going out the other side, because they don't like the website or they don't like the service or we're unrealistic in terms of our expectations of them.



44. **GS – Right. There was a list of intangible benefits that I was referring to in my briefing and I'd like to talk a bit about those. Things like measuring – again I am looking into the measurement and how you do it and how this can be done – systems rationalisation, which actually is a question for JM rather than yourself – error minimisation, in terms of liability of, for example, the bank employee making an error and so on.**
45. MK – We have had a range of issues, because just like any new business with a new system, you do not launch with full functionality on Day-1. It just doesn't happen. And what we *have* seen as many of the changes we've made, to date have really been about 'well, let's put the functionality in, that we always said we would put in. Let's automate certain processes'. So, we *can* measure, for instance, in terms of improvements in the back office banking processes, a reduction in the number of errors that staff are making. Now, if we get less errors by the staff in terms of processing and handling money and cheques and all the rest, we get less customer complaints, and we actually have the staff feeling happy, because nobody likes to make mistakes. So, yes we *can* measure that; and in terms of systems integration in terms of actually simplifying the systems then it is clear that as we mature as a business, I'm sure that we will start to share elements of our back office processing with other parts of the group. Because, again, we wanted to set this up as a standalone business because it gave that focus in terms of the delivery. But once the bank is working, you do start to say, 'OK, let's focus on making the customer service better. Let's focus on making the proposition better; let's focus on making it cheaper to run, by automating, reducing staff etc'. But also 'why do we have to run *this* system?' Because this system that we've got is very similar to the system that another Group company has, back office banking, collections, a whole range of staff like that. Can we just start to integrate that with other businesses within the group? And the answer to that is clearly 'yes'. The question that's still outstanding is 'what is the timescale for doing that and how quickly will we make a return on that?' But it's clear that we can integrate many of our back office systems with the Group's that are now up and going.
46. **GS – Again in terms of measurement, speaking of things like measuring the benefits you're getting from the customer or for the customer, there are 3 issues there: recruitment, retention and remuneration in terms of customers. And again there is the issue of – again I guess IF is not faced with this – customer cannibalisation.**
47. MK – Well, cannibalisation *is* an issue, because of course one of our primary products is mortgages, and another one of our major products is current accounts. And Halifax is a very big player in both of those markets. However, we haven't seen a great deal of cannibalisation.
48. **GS – Can you measure it?**
49. MK – Yes, we can measure it, because we do record where customers have come from. So, we can say – last year over 90% of our accounts were new to the Halifax group. So, we're not getting any material level of cannibalisation over the Halifax book, which is good. Because we are targeted at a slightly different market segment than the Halifax' main propositions. In terms of acquiring customers we can measure the cost of acquisition of those customers via both web and telephone customers, and dependent upon whether they've come to us directly or via an intermediary.
50. In terms of customer retention, what we do measure is a number of issues - who's closing their accounts, but also that hidden retention issue you have in terms of dormancy, people have accounts with you but they don't actually operate them; so,

they're not really banking with you. We are actively measuring both of those and, where we can, we're actually trying to stimulate account activity.

51. In terms of customer reward, what we have is a clear view of where we're going in margin, complicated of course by the fact that we offset. Going forward, we want to increase the number of customers by 50% in 2003, compared to what we had in 2002, and probably another 30-50% in 2004. And the challenge for us is to make sure that the cost base overall doesn't grow in line with that customer base. Now, some of those things can be done through the productivity gains, the natural learning that is already happening. But at some stage, we will face the fundamental issue of 'can you be a telephone and Internet bank and keep the economics of the business in the place where we want them to be?' Answering more and more telephone calls does not feel as though it's a valuable thing to do. But a large proportion of our customers do value the fact that they can speak to our staff, and that our quite complex proposition can be explained to them; so it's a fine balancing act between migrating people on to the web, where we feel we've got the infrastructure to service them - and it will be relatively low cost in a marginal basis - to making sure that customers aren't turned away from the proposition because they think it's too complex if they are not able to speak to somebody that they can build the relationship with on the phone - that's the challenge.
52. **GS – In terms of the actual methodologies, the actual methods – be it financial or something else – you were again talking about a template, for which you said there is a reiterating process in place for improving it. Is that based on the traditional financial methods – you said its cash flow based – the NPVs, the IRRs the Payback and so on?**
53. MK – Yes.
54. **GS – Are you looking at all, or is there any research to the end of using different financial methods or even methods that are more or less IT-specific? Are you looking into these at all?**
55. MK – No, we're primarily focused upon the financial issues, mainly because we have Group minimum standards in terms of what projects should deliver, and why projects should be undertaken. Projects get prioritised in terms of need; most important priorities are urgent regulatory projects, i.e. we will be breaking the law if we don't undertake this work; secondly projects should be managing either business growth or business risk, and we should be able wherever to try and put some sort of financial rationale around that. But we do bring in these intangible issues where appropriate. But again, there is this issue of both the HBOS Group and the regulators above them saying 'we want to be sure that your project approval process is robust in terms of regulatory issues, customer service issues and making the bank more efficient.
56. **GS – Just as you mentioned the overall Group levels, what is the overall role of the reporting mechanisms to the stock market? I mean, there is an issue regarding investment appraisal – especially for IT where benefits take very long to materialise – of short-termism. There is also the issue of the fact that reporting, for example, intangible benefits to the stock market doesn't add value. I had a few questions that we didn't really have the time to discuss about knowledge management and the case for valuation of knowledge assets and all these things that don't really fit to the existing reporting mechanisms.**
57. MK – They don't. We do try and build in intangibles but, of course, we are driven by a range of short and long-term financial measures; and the challenge is always to keep your eye on the longer term and making sure that you don't forget the longer-

term investment projects. But that is quite difficult at this moment. The City is very focused nowadays, increasingly so in terms of what are specific pieces of work doing to produce value for shareholders; and I think the City's view on the long-term could probably stretch to 3 years, but that's about it. And I do see that they're looking for payback. I think there are a whole range of issues where the world is changing so rapidly that there are many things where you can't start seeing the tangible benefits in that sort of timescale; it *is* quite difficult to justify doing them really, because you could be finding yourself down the Betamax route if you're not careful, i.e. you are going to do something that's really good, but actually you turn around and people aren't following.

58. You may manage something technically brilliant but totally irrelevant from a business perspective. It is interesting when you look at the infrastructure that has been developed for the Internet; and it's hugely, in many cases, over-specified in terms of capacity and it's going to take a long long time to fully utilise some of that capacity; but of course, with the way that the technology is changing, you don't actually know whether that capacity will ever be used or whether it will just be jumped over again.
59. Knowledge Management is interesting; supposedly if we know more about our customers we will be able to sell them more, and make offers for them. I don't think anybody has cracked that yet; and there's a lot of time being spent on that. We have spent a lot of money on that; we have a single customer view, which is the Holy Grail of banking. But once you've got it, what do you actually do with it? You have to then invest in getting it down to really tailored, quite specific offers to people and that can be quite difficult to structure in a cost-effective manner and most banks are after that same kind of customer; good quality credit, active propensity to borrow and use financial products. Unfortunately that customer tends by their very nature and type to be relatively promiscuous in their use of financial products and as long as they hold the brand in some sort of respect, they have some time for the brand, then, unless your product is actually sitting there as something that is really good value, they'll be quite happy to go to the Abbey National or whoever, and take their product.
60. That's the issue; and it's increasingly difficult in a commodity-based environment, which is increasingly financial services, to build that added value proposition that makes all this customer knowledge management worthwhile. OK, we've got all this knowledge about somebody, so what do we do? What do we sell to them? There probably is potential – or probably has been potential – in the sub-prime market, because they're generally interested in other things. But it will be interesting to see if we get a bit of a credit shakeout; to see if the people who have actively targeted people in sub-prime areas really did understand their customers well enough and *have* made a sufficient premium on their rates to get a return over a whole economic cycle.
61. **GS – Right. I had more questions, but we don't have time. Just a final one. I was wondering if there is any type of documentation relevant to the financial appraisal or the overall appraisal that you could share with me? You spoke about a template; maybe in its full detail, it might not be something to share but...**
62. MK – I will look at its generic version and if I can share that with you, I will do. I'll be quite happy to share that with you.
63. **GS – OK. That would be great. One more thing I'd like to ask you. I haven't had the chance to do this today – I was to speak to JM. Is there any other people that you would recommend that I speak to in IF?**

64. MK – Specifically about IT?
65. **GS – Yes, IT and financial appraisal in that sort of context. The idea is to get a broader view of the issues.**
66. MK – Right, OK. It may well be appropriate to speak with MG. He is our Head of Application Development; he is the person who generally has to take through many of these business proposals to actually be delivered. If you contact MM, I'm sure she'll put you in touch with MG's secretary.
67. **GS – Right. The final thing is – you know more or less now what I am looking at – do you think there are any areas or issues that I'm missing out?**
68. MK – No, I don't think so. It has been quite interesting in this business to see that we've gone from 'just do it' because we had to build the system, so, many projects did get done even though they've not been fully appraised, to – as we moved to a business as usual stage – a higher level of focus in terms of project returns, risks, deliverables and making sure that those are monitored.
69. **GS – Right, I guess that's more or less all. I don't know whether you would mind if sometime in the near future I contact you for maybe a follow-up discussion.**
70. MK – OK, if there's more you need to cover then you can contact me again.
71. **GS – As soon as I transcribe this, I will send you a copy and make sure to keep you posted on the progress of my research. I may have some interesting results.**



## 2.2. Interview, 17/02/2003

1. **GS** – I will just start by saying a few things about my own background, so that you know where I come from; then, I'd like to kick off the discussion, which is related to IT projects, the process of decision-making and processes of investment appraisals for IT projects, and different other aspects such as the role of expertise within the organisation, relating to the outfit. So, I am originally an Electronic Engineer; worked in Telecoms for a few years and I did the MBA in Edinburgh University in 1996-97. I'm now doing this PhD, which is about investment appraisal and the reasons for doing that are 1) as you can say, it is notoriously difficult to measure and quantify especially the benefits – let alone the costs – of setting up Internet ventures and, in general, IT projects. 2) there are a couple of propositions going around; I don't know if these are based in some dot com boom perceptions; these are regarding what they call the decomposition of the banking model to something which is similar to the utilities model – like Production – Distribution – Supply; and also another proposition that exists about the segmentation of the customer base according to Net Worth. You know, the efforts done from MLHSBC and the like. So, that's me in a nutshell. Would you like to tell me a few things about your own background and if you would like to comment on what I've just said about these 2 propositions?
2. **JM** – Basically, first of all, my own background; I worked with Jim Spowart, who was the original CEO when he setup IF. I worked with Jim to help setup the last two ventures that he has also done, which was the start-up of Direct Line Financial Services; that was the first financial services institution that started selling mortgages over the phone. Also then, I worked with Jim in Standard Life Bank, as part of the start-up with Standard Life Bank, although I worked for a company called Lynx Financial Systems. And again SLB took the concept that had been built in Direct Line of the telephone-based financial services and really expanded that and introduced a lot more of the sort of Family & Friends interest offset capability in the savings product there. And since then, I've really come and worked in IF. Prior to Direct Line I did work in the sort of business side of Finance, in a financial organisation in Northern Ireland, and so I would say that I have more of a business background and a pure technology background as well, which is quite interesting. So, in terms of the points that you were making there as well, I think that there is a tendency to start and try to break down the banking world and to try and categorise the banking world into the different sectors around distribution, operations production etc., some of which, I think, can be done effectively; for example it is easy to separate off your distribution channels and have a conversation about sales and distribution, but, to be honest, I think, once you make contact with the customer, the risk that a lot of banks have is that they tend to actually lose sight of that customer –re-segmenting in that way. And one of the things that we Intelligent Finance do, both through the integrated proposition and the one-view of your accounts that we hold, is to really ensure that we're holding the customer at the centre of all the conversations, rather than necessarily actually slice that off from the bank's perspective; which, I think, it's something that a lot of financial institutions can lose through segmenting too easily – lose sight of that customer.
3. **GS** – Some of these propositions, I guess, came out during the early years of the Internet, when the idea was out there, that just everyone could deliver banking infrastructure and therefore kind of delegate the channel. BT of whoever. How have you seen the perceptions of all these things – for example, what the Internet can do – changing from back to 1999 when IF was set up, to 2003?

4. JM – I think it has changed quite a lot, to be honest. I think certainly back in 1999, when we were starting it, it was very much the year of financial institutions just starting to really go into Internet banking, and there was a lot of uncertainty, I think, for the customers in the public domain around security. 'Can you trust the websites?' 'Can you trust the website for your financial banking?' And that was just starting to change at that point in time; whereas, I think, what changed probably throughout the course of IF is very much that a lot of banks have started to offer application processing in their websites; a lot more customers are now using the web for their financial banking etc. I think that the risks about security... there have been the odd security breach that banks had to deal with. But I think, fundamentally they haven't come to fruition in the way that the public was expecting them to be. So, there's a lot more trust in the Internet now.
5. **GS – Right. Let me just move on to IT projects in general. I realise that there are several strategic, I would say, challenges regarding IT in IF, a company that was setup to be a direct bank from the very beginning; things like business growth and sustainability and longevity. I'd like to discuss a few things about the issues around the IT functionality and the customer proposition. Would you say that, should it not be for the Internet delivery channel and the specialised type of IT that is being used in the customer proposition, that IF would not be able to launch this customer proposition? What I'm asking there is what is the relation between IT and, if you like, financial innovation.**
6. JM – I think that it *would* have been possible to do it without the Internet, but you would have had to have had a different focus again. What I mean by that is that the par of the proposition, is that the IF proposition is very easily viewable and accessible on the Internet. I am a customer of IF myself and I have both lending and savings with them; and there's certainly nothing that I like more than to log on and see your mortgage balance decrease, and to see that decreasing more rapidly than otherwise would be the case. I think that the flexibility of the proposition is also instantly accessible on the website. I can manage my own finances; if I want to change my payments, change my savings, I can just log on and do that myself. I think if we were to take away the Internet channel, there would be things – if we were just offering the proposition through the contact centre – again we would have probably have brought a different technology focused to that. We would be doing more in terms of driving the benefits of the proposition through the contact centre than we probably are at this point in time. Some examples of that would be to really tell the customer more about the value he's getting from offsetting. We would be needing to push a lot more information out to the customer around that rather than the Internet customers have the freedom and choice to do that themselves.
7. **GS – I see. Where I am leading to with this question is, regarding the evaluation of the benefits, from using the Internet channel as opposed to call centres, how far have you gone into doing an evaluation of that side? Or is it something that you didn't actually... well, you may have said 'well, it's there; let's see how it works. So we don't really see what would happen if we didn't have that, or if this didn't work as well as intended'.**
8. JM – I think it's fair to say that at the start of the project, the IF launch, we didn't take the time to do that, and we certainly haven't gone back to do it now retrospectively. However, what we *do* do is now to look very carefully to any projects. Over the last 2 years, we've totally changed really our whole process for running projects, and we really have been moved from, I suppose, the startup of IF was very IT-driven; we're probably still driving a lot of it, but we're trying to get it round so that projects are more business and commercially focused. So, for any project coming through now, take an example, we may look to see whether it's worth our while taking some service out of the contact centre and making that

available on our website. If we were to do that project, we would be looking for the business owner to specify in detail what business benefits he was going to deliver, the result of doing that, as well as, obviously, quantifying the cost and the effort to deliver that project. So, for any project going forward, we certainly do take that view. We simply haven't taken the time to sort of step back and look at it in the overall view.

9. **GS – Overall, when you're implementing your IT projects, there are the costs of implementation – which as an IT person you know that it is the most tedious and it's full of surprises. Is there a post-implementation review process in place?**
10. JM – Yes, there is. Probably from a couple of perspectives, and there are post implementation reviews in place to drive continuous improvement to our processes; but also the focus after implementation. It really switches to driving through and tracking the benefits and the delivery of the benefits; one of the things that we have put in place, as I say, is that a business owner quite clearly commits to the benefits that he is going to deliver, if the project is delivered for him. That may be that he's going to deliver X in terms of customer service, it may be that he's going to commit to delivering cost savings. What we do throughout the lifecycle of the delivery of that project is to continually work with that business owner to review and challenge those business benefits. 'Are they still robust? Has the scope of the project changed in any way? Are we starting to see that we're getting more benefits out of it?' So that right through to the point of implementation, the business owner is clear as to what he's committing to deliver. After the project – even actually before the project goes live – the business owner also agrees his schedule for detailed delivery of those benefits after the project goes live. And then, once the project is implemented, the focus changes to tracking the delivery of the benefits, to make sure that those benefits are being realised.
11. **GS – Right, I see. Speaking of benefits, there is this huge issue about delivery of intangible benefits, which actually brings me also to the nature of IT, which has some kind of long-term focus in the organisation, rather than a short-term one. You just spoke of a process whereby the business owner, as you said, is tracking all these benefits. Now, in the overall process of understanding these benefits and putting them down in paper, are those intangible benefits taken into account with certain delivery dates? Or is it that these are more, as we say, in the notes?**
12. JM – It's more the tangible benefits that we will track. IF is probably in a very specific situation at the moment; I'm sure MK explained to you. This is the year where we're heading to breakeven as a business. Therefore the criteria by which we are judging projects is very very high at this point. For a project to be considered for delivery this year, must deliver a ROI of 2/1; so the benefits must exceed the cost of investment by 2 to 1 within this financial year. So, in order for anybody, for a business owner, to have any chance of realising those benefits in the current year – you're really talking about July-August is the latest date by which that's possible for a project to be delivered – so I think, with that understanding in mind, it is very short-term view that we're taking at this point in time in terms of when those benefits are going to be delivered and released by any project. We do also focus quite heavily on the tangibles, and it's been an interesting process on challenging which intangibles you can turn into tangibles as well, and challenging the business owners to do that as well, which they're starting to do a lot more.
13. **GS – Right. Would you like to tell me a bit more about this? Because quantification of intangibles is equally notoriously difficult to do. If you read, for example, the academic literature people say that 'yes you can quantify intangibles; you can break them down into slices, you can then turn them**



into numbers, and then you can actually insert that into your financial appraisal'. And then there is the other side that says 'you know, intangibles are long-term, lots of uncertainty, you don't know how the market will be' and so on.

14. JM – It's interesting, because some of the ones we've been challenging the business owners on is, they would maybe approach us with a project that says 'OK, let's see how this will improve my productivity'. And they were, to be fair, quite willingly to saving FTEs (Full Time Equivalents) in the business by improving the productivity. The ones that we've been challenging during the year that people are getting more robust on, are around areas such as customer retention, in terms of the sort of customer service improvements, and how they can actually drive out; well actually 'if we improve this area of service, this would help us and prevent us losing these customers' and the sort of financial appraisal there can look at that or what's the cost to recruit a new customer, what's the cost of lost income on that customer etc. and starting to build those in to the equation. Where I feel the real test of any model comes, is all very well quantifying benefits to be taken from any change. But where the real test of the validity of doing that comes, is actually when you ask the question 'whose name is on the block for delivering those benefits?' and who is going to take responsibility and stand over, as their job depends on delivering those benefits. And that's what really, I think, helps to drive out what's worth measuring and what's not worth measuring. It's who's standing up there taking accountability and making sure that they're going to deliver that. Things like potential income savings or potential revenue generation streams are more difficult to get real and true ownership for out of individual accountability. But where you can find individuals who can take accountability for delivering aspects, then that becomes very real and very measurable.
15. **GS – In that sense, I would dare say that people don't really want to get their fingers burnt, quantifying something that is, as you said, potential rather than actual.**
16. JM – Yes, and it's a fine point; it has been a balancing act; we've developed this, probably more of a practice, to be honest, just in the course of 2002, and it has been a process of both challenging people who have come to the table with a business case that says 'I'll save this' – 'OK. So, how are you going to demonstrate that?' – 'Oh, OK; I can't really'. So, is it real? Is it cost savings that actually is going to be used elsewhere then? And it's through that challenge process that we challenge both savings that people are claiming, and also challenge them to quantify some of the intangibles, or things that may appear as intangibles in the first place.
17. **GS – Do you see this process as an impediment to attempting to quantify, or dig into, some of the more difficult intangible ones? I mean, just as I said before, people don't really want to get their fingers burnt, so there are some areas where they think 'Well, my job is on the line for that, {so I'll leave this out}', whereas it might be the case that this area – and I more speak in terms of, if you like, research – might be something that may deliver some very real benefits. So, 'we might want to tap into it, but I can't be the owner of that'.**
18. JM – I think this is a good point, and we have had certain projects that have come forward, where we had multiple business owners; so, we had 2 or 3 people saying 'I'll deliver this element, I'll deliver this and I'll deliver that', to try and address some of that situation. But I think, to me, the quantification of benefits where you don't have somebody very clearly accountable for delivering, that they see no means of measuring very clearly. If you end up in that situation, it's not worth quantifying that benefit. Because you don't have somebody who can see how they can measure that, and whether it can be measured or not, and how they can impact the



outcome. And that's the balancing act; I think, from the financial accountant point of view, you can build all sorts of things into business models and business cases; and I think that's still very valid for new propositions; new sales propositions, new product propositions. But more for the general, the normal IT projects, it's not worth building those types in. Because you have to give somebody a line of sight as to how they can measure a changing benefit and how they can deliver that changing benefit.

19. **GS – One of the things that come out most strikingly regarding IT projects is how assumptions work. For example – and I'm just taking a very old one – back to the 70s where the introduction of robots was considered to be a labour-saving technology and everyone was counting the benefits in terms of labour savings, whereas it has proved at the end of the day, that it was more of a materials-saving technology. So, you see how the assumptions drive the processes and the methods and everything. So, is that something that you consider?**
20. JM – It is, and we had a good example of that actually last year where we had a business case presented for a project, which required people to input data to a new system. There was a new system we were buying, and it required people to collate and input data to that new system. But the output from that system was going to really help them drive productivity savings. But when the business case was first produced, I actually challenged the business owner and said 'this is going to create extra work to you; have you built that into your model?' You actually need more people to do this work. And in certain circumstances, for certain teams, it turned out that this wasn't the case: they could cover that by normal processes; so, rather than keying it in the old system, they keyed it in the new system. But for certain teams it was new work that they needed to build in that business case as well. So, yes, I think you're absolutely right; it's understanding all of the change; for any new project it's understanding what is going to change as a result of that project and making sure that, as well as efficiency savings and benefits, you build in any additional costs, and costs of ongoing support.
21. **GS – Right. Going actually into the decision-making for IT and Internet-related projects, to what extent do you think that the decision-making process regarding IT is different from the one regarding other capital budgeting projects?**
22. JM – There *can* be differences there; and there certainly *are* differences. For example, this year we have probably split the IT investment into 3 clear streams: one is what we're calling our business change programme, where we've agreed a budget that is actually for the business to use on projects that the business are trying to move forward with; whilst we provide all the governance and support and reporting for that whole programme in advance. It's very much business choice and commercial choice as to which projects they want to do and how they're going to prioritise those. The other two work streams are both IT work streams. One, again, is around technology platform upgrades; for example, technologies may be reaching end of life and the support agreements; there may be a need to upgrade because of future capacity constraints and also the added functionality and benefits that you can take from there as well. And, to be honest, the way we have done it is that we built up a separate budget for doing that, and we have a programme created around that, with all the appropriate reporting and governance structures. We adhere to a lot of the same principles as we applied for the business change programme, in that we do go through business case production in terms of what benefits we're going to be taking from this, who's committing to deliver the benefits, what's the cost, the scope, the risks etc. So we manage it very much in the same way. The difference is that it's less quantifiable in terms of actually financial terms for those particular projects.

23. **GS – Right. You said that you created an IT budget. So there is internal competition on that budget rather than overall.**
24. JM – Yes. For the business change programme; that's right.
25. **GS – This process for the IT-related decision making; again my question comes back to the comparison between the end of the last decade – 1999 and the dot com boom – to now. Have you seen that changing?**
26. JM – I probably didn't have as much visibility over it, to be honest, in some of those early days. I think it has changed a lot in that there is a more commercial focus to it these days. There's a significantly increased commercial focus that I don't think was there before. I think, if anything, we used to focus heavily on the cost aspect of new projects and changes without looking enough about the benefits, whereas these days it's much more aligned to what's the value you're going to get out of actually doing something; you do see that because a lot of external companies, consultants and suppliers will come to you and will measure their success in value propositions. So, it's as true externally as it is internally these days. But trying to get the Finance Directors to see that is kind of different {laugh}. They see the cost.
27. **GS – Right. One of the things that comes out of this, as people I've been talking to were telling me, is that back in 1999, it was like 'here's the money, do this. It's good, it's value', and at the end of the day you would end up with something that was completely useless, and people would drop it. Now, it's more cost focused as you said.**
28. JM – And getting the business ownership. That has been the key change; actually getting the business people to stand up and say 'right; I'm accountable for this. I will deliver this, if the project is delivered'. And that has been the significant shift, certainly for us in IF.
29. **GS – There are a number of aspects that relate more or less to the nature of IT and, if you like, the nature of the Internet as well, as a delivery channel, and I would like to ask you whether and how these characteristics are taken into account in investment appraisal processes. And these are, for example, the fact that IT has a shared nature – be it the Internet or internal IT systems; they have a shared nature spread over across the organisation. There are effects such as – if I can use the term – spillover effects throughout the different departments. The other thing, which I mentioned before, was the fact that IT by nature – if you can really say that – or by definition, if you like, is long-term benefit-based; I just mentioned 3 of the characteristics. Are these being somehow taken into account in the investment appraisal process? I mean, looking at the benefits, for example, of an IT system that is built for one department {to other departments}...**
30. JM – It's a good point, and we had a good example of that as well last year where we had a project that started... at the most basic level our business operation is split into 2 major areas; one is what we call the Admin, and one is the Contact Centre. And we had a project last year that was sponsored by the Admin manager, to bring in enhanced capability into the Admin area. To be fair, he recognised that this certainly affected probably about 20 different areas, even in Admin; and each of those areas in Admin had to do work out their benefits and their individual impact from the system. But it was also recognised that it was going to have an impact on the Contact Centre. So we also got the Contact Centre manager involved to work through what the implications would be for the Contact Centre. And, in terms of accountability, the Admin manager took accountability for the benefits in Admin, and the Contact Centre manager took accountability for those

coming through on the Contact Centre. The other aspect that we do in IF in projects – which is more back to the delivery and implementation phases and, to be honest, the post-implementation phase as well – is that we have a small team of people that work with the business that we call Business Mobilisation, which is all about helping the business understand what is going to change. We go through the process design early on, taking these new processes into the operational environment; what is the impact going to be? How does it affect the day-to-day working practices? How does that affect your management control practices? And we actually do a lot of work with the business in advance to help them understand that, work through that, role-play it and assess the state of business readiness in the whole place up to when the project goes live, and then support the project roll out thereafter.

31. **GS – Is this process carried throughout the implementation and post-implementation regarding tracking benefits and costs?**
32. JM – It is; that's right. So, it's helping the business get ready and then you have an independent assessment of how ready the business is. And then it helps them do the rollout into the business and thereafter it supports them after rollout, and eventually it just falls back to the tracking of the benefits.
33. **GS – Is this again a quantitative kind of assessment, or is it more qualitative?**
34. JM – Well, it's more of a qualitative assessment; in that previous example, it would be working with the lower level of managers across each unit that was going to be affected by that project. We identify some key criteria by which we can assess whether they're ready or not. Are they aware of their processes? Is there any need for staff training, communication plans etc? And we run that through a traffic light assessment; red-amber-green traffic light assessment; and issues risks register. And that's part of our standard project management approach, that we really kick off as soon as the project is created to help the business get ready for the project.
35. **GS – Again sticking to the costs and benefits, we spoke about tangible and intangible ones; I'd like to talk a bit about the anticipated and unanticipated benefits, and this actually relates to the general uncertainty that is very apparent especially in IT. From the implementation of the projects that you've been involved in, which ones would you say were the most striking and important unanticipated costs or benefits that you came across?**
36. JM – Probably one of each; we had a project that was actually for the implementation of a new collection system, that overran in cost. And the reason for that – well, there were quite a number of reasons – but effectively the project was initiated at a time when we didn't have sufficient project controls and governance in place – it was quite an old one. But it wasn't set up well, to start with; so the right people weren't engaged in the project, to start with and if you have that to start a project, you're always in rescue from then on. {laugh} So, that project overran in cost. An example of one where we had an unexpected benefit out of, was one where it could have been identified in advance, but it was actually a benefit that the IT team was trying to bring to the business, and it had been identified as a result of capacity planning – capacity management work – that had been done with the business and IT to understand future capacity around a key business process. And as a result of that work, they identified that actually if they changed some of the screens and the way the system worked, just by reducing the number of times the users would have to go in and out of the system, access information differently, that it would make a process more efficient and increase the business throughput. So the IT teams had identified that through that piece of work, and then they went away and actually coded and delivered that piece of work, which came as a major



windfall to the business. They were able to save something like 45 FTEs as a result of that, which is quite significant; so that was a good one for us. But it's interesting as well, because a lot of it comes back to, I think, the accountability and the reward structure that we would put in place. And we have a very simple {JM draws a diagram} process in place for our IT staff bonus scheme this year, where you get a project at the point of business case, where you get the business owner committing to 100 FTE benefits, for example. Then you go into the delivery phase, and this number might change, there might be scope changes, there might be days scoped, something might be noticed that actually is going to improve the position; so at the point of the project implementation the business owner may be able to commit to, say, 120 FTEs and then, after the project goes live, the business owner in the realisation may actually end up realising 150 FTEs. And what we have done this year for our bonus scheme is that we've identified all the projects that were committed to deliver to the business that are going to deliver FTE savings and we've set a target of achieving 333 FTEs for the business, and our staff are being bonused on achieving that. What we will pay them on is this number {120 FTEs in the example}, so whatever is going to be committed at the point of implementation is what we're going to pay our IT staff on. So they need to manage the relationship along this path {JM shows the path from the business case point to the implementation point} very very carefully and they can work with the business closely to say 'how are we going to make sure that this is the right number?' And then it's the business owners' accountability thereafter as to what they actually do go on then and realise. A lot of it is driven out of accountability. And the reward structure is quite important.

37. **GS – Speaking of the reward structure, there is something – relating again to one of the characteristics of IT, which is its long-term gearing – the fact that reward structures are characterised by what can be termed as short termism. You're a manager and you're looking into doing the deliverables for, say, next year or the year after. So, isn't that a problem in terms of people actually focusing on the short-term and leaving the long-term as something that is kind of unexplored in a sense?**
38. JM – It *can* be, to be honest. It's something, I suppose, that we manage what we target performance for our senior managers on, and what makes up a good performance. And some of the objectives in KPIs (Key Performance Indicators) that we set for them is more long-term planning and strategic thinking and planning. But you're right, because we don't have financial structures, reward structures in place that reward that at that level. At our executive level, we do: we have long-term schemes in place, but we don't tend to have that at the lower management levels. But we just manage that through individual performance.
39. **GS – Is this something that you're looking into in the future?**
40. JM – Probably not, to be honest. Probably not in the sense that HBOS is a large organisation, and to change those types of things takes quite a lot of doing. If you're a small company, you're probably more inclined to do that.
41. **GS – Right. I just wanted to speak a bit about examples of, not necessarily intangibles, but things that are kind of difficult to quantify. A brief list of those was in my email. For example, one that is quite important is the systems' scalability, if you like; flexibility in terms of building blocks and how these can be in and out of operations {depending on demand}. How would you quantify the decision to do something like that, when you don't really know how this is going to help you?**
42. JM – That's an interesting one, because we *are* actually doing something like that this year. We're doing some work to try and build in some additional flexibility and



simplify some of the application architecture in our core system. And the reason we're doing this is because it's expensive to maintain and change; it's cumbersome and costly to actually change that. That's a difficult one to measure upfront, to be honest. How we have, again, sold that to the business, is that we have created and we have engaged the business to create and give us a separate budget for doing that work. It's difficult, I suppose, to build the business case in advance as to the very tangible benefits that that will give you. It is very much around the general more flexibility, speed of response etc. And we've been able to persuade the business that 'yes we need to do that'. But the other things that we're tagging on the back of it to keep their added interest is that through these IT improvements, we'd also commit to delivering more FTE savings; and we've signed up to deliver a number of FTE savings as well. Because in actual fact, through improving some systems and the architecture, you can often come across things, which by improving it's really going to help the business, and get into conversation with the business as to where those benefits are coming from. It's a difficult one, and I think it is difficult to quantify in advance at the top level; so, how we've done that is to generate that business interest and the appetite for it through committing to getting some value from it. And it's more the case as we go through that piece of work, we'll start to try and measure the value we're delivering, both in terms of FTE savings but also in terms of additional intangible benefits for the business. And also, I'd like to start being able to measure that in terms of speed of response to being able to change things the next time round: how much less effort is it to change it this time that it used to be. This is difficult to measure as well, but these are the types of benefits you get out of it.

43. **GS – Right. Some similar issues like, for example, security and how much security costs, and how much security can you push in a system; and again this comes into negotiating with the business and say 'well we're going to spend an extra million on security but this reduces the probability of security breach by 0.3%, so let's do it'. Is there this kind of quantification there?**
44. JM – We do try to do that as well; it's very much the risk-base mentality; what is the level of risk that we're carrying on a certain area, and therefore, should we be making investment to address that risk? It's difficult to come up with hard tangible facts with those types of things; all you can really do is to demonstrate that through explaining situations and the likelihood of situations arising. There are some pretty useful, I suppose, risk management and risk quantification techniques you can use to help you actually put a value on that risk. So, you *can* say 'here is the value of the risk that we're carrying, and here's the value of the investment'. And we do do that; we do quantify the financial value on risks.
45. **GS – Things again like the cross-business costs and benefits we already discussed and issues like cannibalisation, retention, recruitment and also benefits from sharing information – which actually boils down to knowledge management, which is a whole different playground.**
46. JM – Things like customer satisfaction, we tend to find that you can take some of that down; because people tend to come to us, a businessperson might say 'we need to change this because it will improve our process, and it will improve customer satisfaction and the level of service that we give to the customer'. We then start to think 'well, how are you going to measure that? How does this show us this as a costly area at this point in time?' And you can often take that back even to the most fundamental level: how many complaints do you get in at this point in time on that subject? Therefore, by making this change, do you expect to remove all of that level of complaints? And you *can* actually cost those processes.
47. **GS – Again this leads me to the issue of perceptions, and I will just give you an example: I was speaking to one of the bank executives, and he was telling**

me that when they launched Internet banking, what they found out was that they didn't actually removed much traffic from their call centres, but rather generated new traffic. And yet another executive I was talking to was just telling me 'each one of these Internet transactions is one less call to our call centres'. Is that true? I don't know. It's again an issue of perception, because what I find from myself as an Internet banking customer is that I will be happy to do 5 transactions in one day, whereas if I was a phone banking customer I wouldn't be bothered to go through the authentication process 5 times over the phone; so again this is where I'm getting to the assumptions and perceptions.

48. JM – It's an interesting point, because you can really only quantify that when you're talking about changing something; if you want to try and put more functionality on the website to take calls out of the contact centre then, I think, that's something that does need to be looked at. I think for me, a really good example of that point is when we were discussing recently about sending outbound text messages onto your mobile phone, and whether this was a good idea, we should be triggering information out to the customers. And my point was that 'yes, we can do that, and yes, for certain things that will be a sensible thing to do. But will it remove traffic from the call centre?' I actually think that in a lot of cases it will encourage an inbound call to the contact centre, because it is an unprompted piece of information. At least, if I log on to the website, provided websites are designed effectively, I should be able to get from that website what I need and it doesn't lead me to calling the contact centre. But I think if you sent outbound text message saying 'by the way, you know, you're overdrawn', that is certainly going to generate an inbound phone call. If you sent out one saying 'by the way, your salary has just been credited to your account' that's probably going to generate an inbound phone call. You know, [the customer may say] 'Great, you've just reminded me I wanted to do something!' {laugh}
49. **GS – Right. Have you thought of the e-mail alert as an alternative? In that sense this would be more likely to generate traffic to the Internet channel because you're already logged in, and once you see your message, you want to take immediate action.**
50. JM – Yes, that's right; so, for people using that channel that's more appropriate. For phone customers it may be the mobile and the text message. But you're right; these things often get lost, to be honest; it's whether it is going to generate extra cost to the business.
51. **GS – I just wanted to speak a bit about methods for investment appraisal and – of course I know that you're not in Finance; we had a conversation with MK about these things, and what I've asked there, and I would like to ask you too, is: from your own perspective, from the IT perspective, the methods for financial appraisal for IT project, are they the traditional financial methods? DCF-based, payback, ROI etc?**
52. JM – Yes, they are the traditional ones.
53. **GS –Digging into the literature is sometimes very interesting {laugh}. I have found a host of methods that claim to be IT-specific. And what I'm finding more and more is that whereas these methods are there, they're not being used. That's a very brief table of such methods {GS shows the table of appraisal methods} – I can actually send this to you by email – and refers briefly on methods used for IT valuation. My question there is, are you looking into – not any of these specific ones but – implementing or using any IT-specific techniques?**

54. JM – We're not, to be honest. Not at the moment. Maybe we will need to; probably they haven't been necessary up to this point in time. It comes back to the fact that we probably, as an organisation, focused on short to medium term at this point in time, because of the drive to breakeven. And therefore it's much easier to assess projects in short to medium term than it is in terms of certainly looking into long-term assessments. Obviously, once we get passed that milestone of breakeven, it's a different landscape that we're facing into. And I think, we may need to look at more comprehensive, I suppose, methods of investment appraisal.
55. **GS – So, you're not doing that because, well, you said you're currently focusing on the short to medium term.**
56. JM – Yes. I think probably, one other thing that I would say is that I would need to understand them in a bit more detail; but one of the other things that we're very conscious of here is putting sufficient controls and governance in place around projects, to make sure that they can be controlled effectively; but actually making sure that that in itself isn't slowing down are delivery timeframes. So, it's how you can bring a lot of these controls and assessment things as an added value, as opposed to actually a barrier to projects. And that's bet of this sort of challenge that you need to manage from a commercial point of view as well.
57. **GS – Right. Is it that the company believes that using such methods is not worthwhile because they're not going to reveal something new? Or is it that it's not worth for a company to do the investment of developing such templates or frameworks, in the sense that the benefits from it will be outweighed from the costs?**
58. JM – It's probably more to do with the fact that we're a very young organisation; and there's a lot that we can do to improve {laugh}. We've no shortage of things to find that actually you can pull together a business case that says 'there is a lot of value in doing this'. I suppose it's about driving priority of which ones you do first, in that sort of climate and landscape as well. And a lot of that is driven out of financial returns; it *does* come down to the basic: Which ones are going deliver the most financial benefits straight away. It's probably to do with the maturity of the organisation as well, as much as anything else.
59. **GS – I see. There are also a number of methods, for example, I don't know if you've heard of the Real Options Valuation, which is actually based on financial options pricing, which is a method claiming –at least – to attribute some positive value to uncertainty; uncertainty is not risk; it can be positive or negative. And, in fact, what usually happens is that in investment appraisal most methods are using risk as a proxy for uncertainty, whereas uncertainty has positive connotations as well. So, you're not looking into something like that?**
60. JM – No, we're not. I don't think we have a need for that yet from where we are.
61. **GS – Right. I just wanted to move on to another side, which is about expertise. This is again about IT projects and companies like IF, young and IT-based firms. At this point in time, would you say that the most, if you like, important or pertinent expertise is the traditional banking expertise? Is it the IT expertise? Is it the Marketing, Finance, or is there something new? It is about balances of power rather than anything else in that sense.**
62. JM – I think it's more commercially minded people that are more important these days; it's more the commercial focus, which, I think, can be applied to all of those areas. It's certainly something we are trying to bring to our IT managers; the commercial focus in terms of what is the value of the work being done. It can apply



equally to Business Operations, to Sales people, Finance people. And getting people to think of what services they're delivering and what's the value of these services and bringing that commercial mindset. I think it's in a very very important scale in today's industry.

63. **GS – In the overall decision process – and we've been talking about the financial appraisal – what do you see the role of Finance being there? I mean, in a traditional manner, Finance has played the role of the 'bottleneck' if you like. In an environment that has been – and still is – growth based, how have you seen that changing, if at all?**
64. JM – We probably work in such a way that any projects that we're putting a business case together for, we're quite clear upfront with all of the parties that need to participate in that; what our dates and what our plan is, and therefore what their commitment needs to be to getting it there. So, we haven't really have a situation where Finance, for example, shows up as a bottleneck, but in that project prioritisation group that we have, we certainly look to Finance; their responsibility in that is to have reviewed and stand over the financial assessment in the business case, in terms of *the numbers*. We wouldn't then ask them to take the responsibility of saying 'have we squeezed every last oints of it?' in terms of the absolute thing. That in the business benefits is back to the business owner and the IT cost is back to me, as in terms of saying 'yes, the IT cost in there outstand over those'. But as for the Finance, they put together that financial modelling and done the appraisal.
65. **GS – In terms again of the side of knowledge management, how have you seen the use of the Internet channel affecting this, - if you have seen it?**
66. JM – I've seen it affecting it in that, again, probably as we're a young organisation, we start with the basics, and you build then the niceties after that. And we have quite a demand to make available through intranets etc. a lot of e-learning capabilities and applications both for the business and for our own people. To be honest, it's something that we haven't done as yet, but we *will* do in due course.
67. **GS – I think that's everything. There are other things we could talk about; I can go on forever but I won't {laugh}.**
68. JM – It's a very interesting topic.
69. **GS – Yes, it is. What I am especially interested on is to see how this new channel, if you like, has affected the usage of call centres, which exist in the UK since the late 80s. And how this, more or less, organisational culture is changing and how these two channels are impacting to eachother, being integrated and so on.**
70. JM – We were fortunate enough, at least at that stage, to have the Greenfield startup, that we were able to integrate them from the start, which has been significantly important to us. A lot of organisations – you're right – have now got an Internet system and a contact centre system and they're now looking at projects to integrate that; we were able to do that right from the beginning.
71. **GS – How have you seen that going forward? Was it smooth?**
72. JM – It was very smooth, to be honest; because it was just the way it was designed and built from the very beginning. So, a couple of examples there, are if a customer phones us through the contact centre, we obviously maintain a contact history and the fact that the customer has contacted us. The agents put notes in that history about what the conversation was around. If that customer logs on to the web and transacts on the web, that's also updated automatically onto that



contact history, so that, in any point in time, the agent in the contact centre has got the full history of what that customer has been doing. We've also seen that impacting us in that the web applications that we have built for use by the customer over the Internet are exactly the same applications as in our contact centre. We simply wrap it by what we call a 'Superscreen', which gives the agents their scripts to help them with the conversation etc. and it's a bit of a launch pad into other applications; but fundamentally it's the same application that they use internally as is used externally, which obviously significantly reduces the cost of maintaining different systems, Internet and contact centre.

73. **GS – Have you built from the beginning – or did you need to build in later – any kind of scalability that we were talking about in a call centre as well? Because what you find is that, for example, I've been talking to people in another online bank and they said, there was a problem of scalability in the beginning.**
74. JM – Is that from a business point of view or from an IT point of view?
75. **GS – I guess from a business point of view more or less, in the sense that you have to deal with is peaks of volume and you have to handle that, but you don't really want your staff levels so high up during normal operations (non-peak). There is some kind of flexibility issues there.**
76. JM – Yes. We do an awful lot with our specific resource management area, dedicated to the contact centre that uses tools and systems to do a lot of that resource scheduling. And unfortunately some of that can only be built up by our track record and experience on what are your peak times, what level of business are you likely to be getting, and at least now that we have 2 years that we're a live operation, we've got some history that we can look back at, and use that going forward for our forecasting. But before that, it pretty much is the best estimate around {laugh} in terms of how many staff you need etc.
77. **GS – What I would like to ask you is: is there any form of documentation that you could provide to me at all regarding the issues that we've discussed?**
78. JM – There's probably not, to be honest. We haven't really captured any of that. There's no sort of clear area where we could bring that out. I'll have a look and see when you send your document to me; perhaps I can take a look at it and see if there's any points in that we were referring to, that would make sense for me to try and send something out to you. There's nothing that jumps to mind.
79. **GS – Regarding post-implementation reviews, or any kind of templates and stuff like that...**
80. JM – OK, there might be some things that we can dig out and send. Will they be kept confidential in terms of the report you will be making, or will you be publishing those?
81. **GS – No. I'm using any of that material for my own knowledge and treating these confidentially. What I am using them for is building the case studies, rather than just presenting the templates and say 'this is the way they do it' {laugh}. The other thing is, I'm speaking to MG sometime near. Do you think that apart from MG and MK I spoke to, it would be valuable for me to speak to anyone else? For example from your own area?**
82. JM – Yes; I think it probably would be. I have an individual who reports to me, called PL. He is the Head of Business Design. He works in partnership with MG; he's responsible for all of our business areas of change. So, he's responsible for

the business project managers, the business mobilisers, all our process designers. He's the one who has really driven the business-owned project delivery process and methodology that we actually adopt in IF. He also used to work for a consultancy firm, so he will bring to you quite a good perspective almost from the consultancy trying to sell-in to permanent organisations, as well as what he's learned from working in IF as well on a permanent basis. So, I think he would be worth talking to. He's not an IT person, but he's got real IT awareness; he has worked in IT projects all his life, but very much from the business perspective.

83. **GS – That would be useful. How can I contact him?**

84. JM – If you contact through ED, MG's secretary. ED is PL's PA as well.

85. **GS – Right. The final question is, after this 1-hour long discussion, from what you've heard and what we've discussed, do you think that, in researching this area, there is something that I'm missing out? Some area for example, or an aspect that I'm not looking into?**

86. JM – You might be interested in following through the accountability of it in more detail. Really because what you're looking at is researching the investments appraisal of projects. But to make any investment appraisal real and to happen, you need accountability for delivering that. It just might be worth doing a little bit more into that. It's all very well having a model that tells you it's worth doing, but actually who is committing to delivering that as well is important. I don't know even if the conversations you've had to date have given you any insight into that.

87. **GS – Well, actually, there is some insight but not as explicit as you mentioned. People tell me that, yes, at the end of the day we have a process owner and people accountable who say they will deliver the benefits; but usually they will not give this high importance into that in terms of the perceptions and what intangibles they might deliver. So, that was an interesting observation; I'll bear that in mind. Thank you very much for your time.**

88. JM – No problem; that's OK.

### 2.3. Interview, 6/03/2002

1. **GS - Just to give you some background, my research focuses on Technology Management, and what I am looking in that perspective is the process for appraising investments in electronic banking operations, Internet banking operations in particular. The main issues that I am dealing with there, are actually the practices of decision-making for going forward with such projects, the process of investment appraisal itself in both the financial and the IT side of things and the strategic as well. The main focus, if you like, my hypothesis there, is whether there is something that is being more or less missed out from the process of investment appraisal as to the type of information, the rigour, if you like, with which this appraisal process is being done with respect to the final results, the post implementation reviews and all the relevant processes.**
2. **There are a few other propositions that I am looking into; one of them, which I was planning to ask you about, is a proposition about the decomposition of the banking model with the facilitation that IT offers in that respect, into something that is more close to the Utilities model – the Production-Distribution-Supply kind of thing. The other thing I was investigating is - again on the basis of the Internet being there as a new channel – the segmentation of the customer base according to net worth or according to different types of characteristics. So, what I would like to do today is to discuss with you several things about project prioritisation of IT projects, decision-making and investment appraisal; and I would like to have the take from the Applications perspective – your specialisation.**
3. **I'd like to say a few things about my background so that you understand where I come from; I am originally an Electronic Engineer. I graduated in Greece. I worked in telecoms for a couple of years and then took an MBA in Edinburgh University. I am now a Research Associate with the University of Edinburgh and doing this PhD. What I'd like to start from, actually, is ask a few things about your own background and then kick off the discussion about IT projects. Specifically I'd like to start by asking you about the proposition I mentioned about the decomposition of the banking model, based on IT and what is your opinion on that.**
4. **MG – Right. I'll kick off with a very brief history. I'm for 20 years in the IT industry, primarily in mainstream applications development, all in financial services, although not necessarily on mainstream banking. I was heavily involved in electronic banking in the corporate market pre-Internet, and most recently delivered the Internet solutions for retail and corporate banking for Bank of Bermuda on a billable basis; and even more recently still in IF for about 8 months. So, I have a fair understanding of the capabilities and some of the limitations of the electronic delivery channel for banking, and certainly some insight into user take-up inside and outside the UK. Hopefully this is of some interest to your research.**
5. **GS – Yes it is, definitely. You said you've been in IF for 8 months. I was planning to ask you a few things on insights on launching the overall project of mortgage offsetting in IF from the side of IT systems, complexity and from the side of investment appraisal, development and integration, and whether an integration was to take place after the project went live, and all the dynamics of implementation; but I guess since you've been here for less than a year, that wouldn't be appropriate.**
6. **MG – I'm afraid I missed all of that fun {laugh}. But having said that, having read your notes on the decomposition of the banking model, what was very interesting for me coming into IF was a recognition of how powerful the customer proposition was from IF, because the system had been built from scratch. So, there is a single**

total integrated view of our customers, because we set out to build a single total integrated view of our customers. And so we didn't have the baggage that most organisations have had in terms of trying to somehow cobble together a single integrated customer view by almost trying to do a customer aggregation across all of our legacy systems. And certainly in the area of offsetting, having that view as fundamental within our design, means that we *could* deliver an offset product – against anybody trying to deliver an offset product spread across disparate core accounting systems for mortgages, loans, credit cards etc. And typically these aren't all accounted for on a single package; they're accounted for 4 or 5 different packages. That would be difficult. So, new entrants – and IF counts as a new entrant in that regard – *do have* that advantage of being able to start from scratch. So many people are investing heavily on CRM systems; we just built them; it was a by-product of building up banking products from scratch.

7. **GS – In the overall proposition of IF, the IT side, and specifically the Internet delivery side is quite pertinent, if you like. Would you say that should it not be for this delivery channel, you would not be able to launch the customer proposition? I had this discussion before with JM and she was telling me that 'yes, we would have been able to launch it, but we had to have a different focus', in the sense that if you don't have the Internet where the customer can see everything over one screen, then you would have to push things through the telephone channel. What is your opinion? Where I am actually getting to, is the relation between the usage of the Internet – and all the IT that comes behind it – and, if you like, financial innovation.**
8. MG – Taking a step back from that, what I believe is important is customer choice. It's highly desirable for our customers to use the Internet from a cost perspective. But buying a house is one of the largest decisions that most people make in their lifetime. And research shows us that when people want to make those big decisions, they like the comfort of talking to somebody about it. So, when I look at the sort of Internet space, I try to understand the human element to it as well, and so, when you talk about financial innovation, for me, financial innovation is all about understanding what the customer wants, and delivering it as effectively as possible; there's almost an act of faith that delivering it to them via a computer quickly and cheaply is what they want. I fundamentally believe that for some products and services that's just not the case.
9. So, the fact that IF launched with a telephone-only service, there was a huge expectation in the marketplace, because we tossed a huge expectation and because we tried to do something that nobody else had done. I don't believe that the genuine customers who were looking for a mortgage really care at all whether our Internet type was up or not. The fact is that they wanted the mortgage, they wanted it at a good price and they wanted it delivered efficiently and on time and without hassle. They wanted it to be administered thereafter without hassle. We gave them that. So, if your question is coming from that direction, 'is somehow the Internet a way of delivering financial innovation?', I would say the answer is Yes, *but* it's only one of several channels, and it's important to pick the right channel for the right service. Having said that, there are some people who are very happy to make no sorts of financial commitments by browsing best-buy tables and not having to deal with the human element. Again, our policy is to offer customers choice. So, there are things you can do on the Web that you can't do on the telephone, for some very good reasons. it doesn't work the other way round; there are some things you can't do on the Web that you can do on the telephone.
10. **GS – The angle I was approaching it from is that the opportunity given to the customer once they have purchased the mortgage to have control through self-serving, if you like; because it's a flexible product: the more you pay into your account the more savings you have and the more you have loyalty with IF, then the more you can arrange how you make the payments and you can**



**shorten payoff periods and so on. I was actually talking about it in the after-sales context.**

11. MG – Right. In the customer analysis that we did with the Bank of Bermuda, as we built the system, we sort of assumed that people might come in a couple of times a week – in the retail market – to check their balance; and when they came in a couple of times a week they might spend 5-10 minutes viewing their statement and then maybe another 5-10 minutes paying bills. And we based that on the assumption that we were normal people, and that's what we would do. Statistics showed that people would spend up to 3-4 hours a day reviewing and moving money between various accounts; I guess the average Bermudan may have more financial dealings than the average person in the UK, but there clearly was pent-up demand there to get better access to their finances and the ability to review their position and take appropriate action; there was clearly a pent-up demand: when the Bank of Bermuda delivered that service, the take-up was quite remarkable. I haven't seen that trend in the UK, and that's just because the availability of other channels – telephone banking – is a well established and a very efficient service. The branch network supported by BACS and CHAPS is a very efficient service; so, as a nation, for a long time we've had access to our finances. So, I'm not sure that the Internet has delivered the quantum leap in terms of access and availability that it obviously did on Bermuda.
12. **GS – So, it's more an issue of demographics and customer habits, in the sense of the available infrastructure being there for a long time and customers having been acquainted to use alternative channels.**
13. MG – And effective alternative channels; because by the time it takes my computer to fire up and for me to logon, I obviously could have initiated a phone call and done the business before I've even logged on to the PC.
14. **GS – What I'd like to speak about now is more or less IT projects and the whole process from defining a 'proof of concept' to reaching the stage of implementation and delivery; what I would like you to tell me a few things about there, is the side of how the project moves on from one stage to another, especially regarding the individuals being involved in relation to their background, from the different expert groups like Marketing, Finance, Banking, IT, E-Commerce etc. Could you briefly talk to me about the process of an IT project on these respects?**
15. MG – That's a very broad-brush question, so, let me do my best to answer it. For me, the whole process starts at the ideas stage, which may or may not result in an IT project. But let's assume that it comes out to the Boardroom. For me, an organisation needs to have a mechanism for capturing those ideas and being able to mobilise the relevant stakeholders, to be able to quickly assess that idea. And by quickly assessing, healthy organisations generate a large number of ideas and will implement a very small fraction of them. But you cannot afford to divert large numbers of resource or large percentages of your capacity to dealing with the 90% {of ideas} that don't go any further; so you need an effective mechanism. So, in that regard, key stakeholders and key decision makers, from an IT perspective, that's where we would look for pretty senior, pretty heavyweight project managers and functional analysts and designers who can quickly assess those ideas; I call it "the 24hr heads-up".
16. So for most of these ideas, if you get the right stakeholders together, within 24 hours you can say 'it's this big or it's that big'. And that's usually enough information for an executive sponsor to say 'actually, in terms of the business proposition here, that worth pursuing to the next stage'. That process *can* work very effectively; the downside is that if you're going to have the resources able to make this sort of assessment, then inevitably those requests come down what I

call my production line, so you pull key resources from projects that are already underway to assess that idea, and the production line stops. So, you talked about the process of investment appraisal; it's making sure that you've got some gateways in place before you actually go and start to interrupt a production line that's already running. Let's assume that you've got the gateways, it looks feasible and it's a business case that holds water: Any organisation needs to have an investment appraisal process that doesn't look at proposals in isolation, but looks at the whole programme of change. So, looked at in isolation, every idea I see is a good one {laugh}. Put more together, and suddenly you've got an organisation that's going in hundreds of different directions at once. For me how is feasibility standalone is how does *this* fit into your overall strategy; how does this fit into your overall commitments in terms of your programme of change, and can you afford it in that programme of changes? Clearly IT is the key stakeholder in there in terms of doability, affordability and strategic fit. Some very good ideas from a business perspective can substantially change the cost model for IT; and typically, in a retail bank, IT is usually the second largest cost behind the branch network. With the advents of the Internet and other technology-based delivery channels, it's going to arrive at the first place, as the single largest cost item. So, managing that cost going forward is clearly essential.

17. **GS – We were speaking about developing a business case, whereby, because you want to see it from the strategic perspective of the overall organisation, you have to involve some key people from different areas; what I wanted specifically to discuss about was the role of Finance – because we talk about investment appraisal, a big part of which is the financials. What I mean is, for example, I've been talking to people from about 10 FIs in the UK and there are clear indications that in some cases there is some kind of a silo approach, if you like, where Finance sometimes is the bottleneck for pushing a project forward, and whereby you have some kind of an isolated role for Finance, they being the key people who will decide at the end of the day whether a proposition is going forward because it's within cost limits, or whether it has to fold back because it's costly and so on. How do Finance people integrate with the business case proposition development in IF?**
18. **MG – In IF, Finance is an integral part of the business case production. So, there is a project assessment Board and Finance have a seat on that Board, as IT does. But in bringing any individual proposition forward, there's a team that comes together in order to prepare that business case and to basically say 'yes, we as a team believe that this business case should be presented to the Board for assessment'. And Finance are an integral part of that team; they're not the gatekeeper at the end. They, like anybody else in the team, have a role to flag-up if they believe that the proposition doesn't hold water for whatever reason, and that's an integral part of the collation of the case, as opposed to waiting till the end: do all the work and then say 'well, actually this is wrong'.**
19. **GS – So, there is an issue there. If we move to the stage where the project gets accepted and implementation starts, implementation is a notoriously difficult thing where one of the main problems is that it is a dynamic process. You're pulling resources all the time, you may have to make initial assumptions which change with time – especially in IT where implementation is lengthy – and certain other aspects of the environment may change, leading to re-costing or re-identifying benefits and so on. Is there a dynamic process of continuous assessment in terms of investment appraisal during the project?**
20. **MG – Historically there hasn't been that approach; since coming onboard I'm very used to working with two-phase planning and milestone reviews. And two-phase planning for me is 'I'll give you a hard estimate for this phase of the project and you**

can measure me by that, and “I’ll give you a soft estimate to the end of the project. But when we get to *this* milestone, I will give you a hard estimate on it for the next phase and I will give you a soft – but *harder* – estimate to the end of the project.” And just as you described, you go through these phases in order to develop more understanding; and a good result is to recognise that the proposition no longer holds water early enough in the process, to minimise your sunk investment. Whereas it wouldn’t be the first organisation I’ve worked in where right at the front, based on no more than a feasibility study, you commit to delivering something, and the mantra is almost “we said we want it, so we must deliver it” regardless of cost. But if this is to work for me, there’s a key commercial imperative, which is continuous assessment, not just of the progress of the project but of the validity of the proposition as well.

21. **GS – Right. I just wanted to move on into more specific issues regarding the costs and benefits. And again that links back to different implementation hurdles if you like. From the IT project that you’ve been involved – not only in IF but also in previous organisations you’ve worked for – would you say that there were key unanticipated costs or benefits? And the second stage of my question is, which would you say were the main reasons there for them being unanticipated, and being later revealed?**
22. MG – Can I ask you a slightly different question? Because it’s one of the key strengths of IF as opposed to, again, many organisations that I’ve worked with or observed, and that is the creation of a Benefits Realisation Plan. So, before you even get to *unexpected* costs or benefits, a frequent omission during the building of the project, is actually establishing the plan for *how* the benefits are going to be realised, and putting in place the measurement to ensure that.
23. **GS – Yes, that’s where I was leading to, but I was taking it there from a different angle {laugh}. I wanted to link that to the investment appraisal process and whether there is this plan for taking account of some benefits; and actually I was about to ask you about the tangible vs. the intangible benefits and how these plans are being affected by perceptions. But I think you’re absolutely right; that’s where you start from: creating this plan, and this is often, as you said, an omission on many organisations; there is no solid plan for that, and therefore you come up with many unanticipated costs and benefits.**
24. MG – At If, the benefits in the business case have a named person responsible for the delivery of them, and there’s a plan that ensures that these benefits are very easily tracked – tangible benefits clearly – measuring those FTEs or revenue savings that relate directly back to the budget. And it’s very refreshing to see that level of focus in making sure that the ROI is realised; because it’s a very easy decision to spend the money; it’s a little more difficult to actually go and measure that you got back what you intended to. The other area on cost and on benefits realisation – and that’s another key strength in IF, is that people focus very heavily on building the product; it’s almost as though a large number of people go and lock themselves in a room to build a product, and everyone stands outside and waits with eager anticipation. And then they open the door and the product comes out and they say “that’s wonderful! But what do we do of it now?” So, it’s what we call mobilisation: getting the business ready, making sure that we understand the people processes that are going to be impacted by delivery of this product, making sure that the training is in place, making sure that the procedures are written, that documentation is ready, that the organisational structures are realigned if necessary, and all of that being part of our testing process; so as that when we’re ready, the product slips into production and immediately you’re into measuring the benefit realisation. That happens not by accident, but by design and at a cost; and those costs are recognised and put into our business case production and



assessment. Again, with other organisations, those costs – even of the need is recognised – are not accounted for in the business propositions.

25. **GS – Just as you said, every cost or benefit – and that was the impression I got by speaking to both MK and JM– has an owner. However this, kind of, leads to a reluctance to own benefits that are more to the intangible side than the tangible one. And what I am saying there is that, in having an effective investment appraisal, in a sense you have 2 components: the one is the accurate measurement of the tangibles and the other is the measurement – where possible – of the intangibles. What this kind of ownership, if you like, of costs and benefits might lead to, is that intangibles are altogether left aside to the more qualitative reporting, rather than to the attempt to quantify whatever is possible; and if you cannot be quite definite about what range of financial benefit you can get from the intangible side, then you don't really want to own this benefit because you will end up possibly not delivering it.**
26. **MG – I guess, what I would say is that if you establish an arena or if you're trying to establish an arena, then one of two things are likely to happen: one takes ownership and puts in place whatever are the appropriate measures to try and track progress against these intangible benefits, or he doesn't. It's 50-50. If you don't establish an owner, I can guarantee that nothing will happen. So, I'd rather have the 50-50 chance.**
27. **GS – Yes, but what I was actually talking about is that if you had clear ownership of benefit which will be intangible, then this potential owner may prefer not to run the risk of not delivering but rather stick to the tangible ones. And that actually links to the fact that IT in general as an aspect, and the nature of IT is such that many of the benefits are results of, for example, systems rationalisation or improvements in productivity – the so-called productivity paradox – or improvement in the quality of work that people do; all these things are from the intangible and long term side, whereas the tangible ones are more, by nature again, in the sense of the more short term and the more clearly definable ones. And what you don't really want is losing sight of the very nature of IT, which is the long term and what I call the 'spillover effect'. You have an IT system here and this affects 10 different parts of the organisation, and you really want to keep track of that; but if you don't have this kind of ownership, then it's lost.**
28. **MG – Again for me, I would say that there is no point in investing in IT or anything unless it is commercially imperative to do that. And therefore over against the tangible or intangible benefits, how important are those to the organisation at any point in time? And the answer to that question will determine the level of interest that the Executive will place on the measurement and reporting and tracking against realisation of those benefits. And that function of time is important because it is, as you said, investment in IT *does* have that spillover effect; but most important for me in my position is the fact that every dollar we spend today on developing new products appears next year as 20 cents in increase of costs. Now, I'm measured and rewarded on my productivity and efficiency, but every time these guys spend a dollar I know that I'm going to explain away 20 cents next year, because they will have forgotten all about it; they'll just wonder why my costs are going up. So, I guess this is tangible, but there's a cost that flows through that most people lose sight of. Even if it's in the business case today, come budgeting around next year, they'll all have lost sight of it; so I am highly motivated to make sure that I track and report against this sort of "benefits" – with brackets around them, because they're negative – and if an organisation is trying to change culture, at any point in time, how do you measure that?**
29. **But if that is the number one priority on the Executive, a) they'll find an owner and b) they'll know that they definitely have to find ways of measuring and reporting**



back on that. And I've seen it operating at both ends of the spectrum where there is a culture of benefits realisation in the organisation – whether it's tangible or intangible – people will find a way of measuring it. They really get smarter, in that they don't put too much effort into measuring the it'sy-bitsy stuff that isn't really on the agenda today, but they make sure they've got the right measures in place for the stuff that matters to the organisation at this point in time. At the other end of the spectrum, in an organisation where the culture of benefits realisation doesn't exist, absolutely if they're not measuring FTEs then they're surely not measuring very much else. So I don't think that the tangible – intangible is such a big deal; and if the culture is there, then the executive who've created that culture will also set the agenda for what are the important measures for them at any point in time.

30. **GS – Right. What I wanted to ask you in my next question is around the influence of perceptions regarding investment appraisal; and I will bring the same example that I brought to JM when I was asking the same question. For example, back in the 70's there was the case for robots applications, where people would go by the perception that robots were a labour-saving technology; and everything was measured around that. It turned out to be that robotic applications were mainly a materials-saving technology; so you see that the measurement of costs and benefits there was done on the assumption that it's labour cost we want to minimise, whereas this was not the case; so it was a matter of interpretation of reality, if you like. What I'd like to talk about there, in relation to IT in a financial institution is, what is the influence of the perceptions on what technology will do, on what you are measuring? And at a second level, what would you say is the relation between the investment appraisal practice – again relating to perceptions – and the actual reporting mechanisms? Just what you said; what is important to the Executive and what is important for the stockmarket.**
31. MG – Again, it is dynamic; that's the first thing to say; if I take IF as a great example, we were completely taken aback by the success of our business launch; our business plan didn't include a third call centre on the side. We had a call centre here, a call centre in Livingston and the growth of our business meant that we exceeded our capacity. So, there was a very strong drive - once we've launched and the business was still growing – in the organisation to ensure that we didn't want to slow down our business in any way, shape or form, but we really didn't want a fourth call centre. So, the perception at that time was, how do we do the same work with the same number of people? No driver to reduce the number of people, but definitely a strong driver to do more work with the same number of people. And any organisation that is in the process of continuous improvement is always going to revisit that very simple equation. And if you look at IF's proposition, what we were trying to do is understand how we could differentiate ourselves in the financial services market, while in the financial services market generally, the churn for mortgages, i.e. how quickly people redeem it, was just under 4 years.
32. That would be incredibly expensive for IF; particularly to business that we acquire through intermediaries. So, we'd become incredibly more profitable if we can retain customers for 6 years, as an example. So, suddenly there was a shift; we weren't just looking at the equivalents of FTE savings by driving productivity; we started to look at the customer and how we were going to develop products and services that would change customer behaviour. Not to self-serve, which would help our FTE driver – that was already baked in; but we're looking at the customer in a different way: how are we going to retain the customer and how are we going to engender loyalty. And suddenly that become an important part of our investment appraisal. And that dynamic, I'm sure, will change towards different products; legislation is putting greater and greater demands on financial services organisations to set aside capital against operational risk. Without capital, we don't lend money and we have to go out and acquire more capital that would cost us money. We much rather take in deposits to have to go out to the market to buy that money.

33. So, you can see that there will be a driver for us to increase liabilities on our book. That will overnight become a different driver. So, I'm not sure about the question of perceptions but I'm acutely tuned into realities; and the realities are that our business is dynamic and the key factors that made an investment appraisal attractive yesterday may not be the same today. This comes back to your question earlier on continuous milestone appraisal, so it might not be that the project was suddenly found that it was acquiring more cost and the business case didn't stand up; it might be that the business has moved and actually the project in isolation isn't going to deliver any less benefit than it was before, but our focus has changed; it might be a good commercial decision to stop the project, even though it's healthy, even though it's all on track. The dynamics of the business is changed and therefore that is no longer the right thing to do in investment terms. So, will this be interesting to where you're coming from in terms of perceptions, because, for me, these are all very hard measures?
34. **GS – Where I come from in terms of perceptions is that some of the traditional perceptions – largely documented in the literature – about how different segments of the business see investment appraisal and its role; and this again leads to different expert groups. It may be that (and that is especially apparent in silo-type of organisations) you may have the Finance people who see things in their own way, you may have IT people who think more of the long-term and they say “well, these people in Finance are not actually looking to the long-term” and you get some conflict of interests; and you have different perceptions from people who are actually doing the investment appraisal and what they put into that investment appraisal as being important.**
35. MG – Can I give you an example? I think what you're describing I see in many organisations; when we've been talking to date, we've been talking about customer-facing product systems really; and I guess the bread and butter of an organisation is what it sells and what the outside customer believes it sells; so it's what's in the shop window. Behind that, if we're homing on IT, there's a whole infrastructure on which the application runs and that can really relate to what you are describing there, when you try and get an investment decision in the infrastructure. Because the investment decision to go and buy a new hardware platform usually has plenty of noughts at the end of it; it's a big decision, it doesn't impact your customer today, you're putting this in, so that applications can use it in the future. And those {decisions} are usually very difficult: the perceptions around investments appraisal definitely have differences of dynamics because the Finance guys say “that's not the bottom line today, and where's the revenue stream?” And the Marketing guys say “That's not giving me anything else to sell to my customers. Where's the marketing line?” And the Customer Services Director says “That's not reducing my number of complaints. Where's the service line?” But the IT Directors say “Actually, if I don't make this investment now, you won't have a service to offer in 24 months”. So, some of your questions are very relevant to those infrastructural investments, because typically the shop window investments is something where everybody can touch and feel the benefit at the point of delivery. Some of the infrastructural stuff may never touch and feel the benefit.
36. **GS – What you're saying is that if the Marketing manager cannot see that, the Finance manager cannot see other benefits and so on, and still a decision has to be taken on IT infrastructure, then where does the investment appraisal come into? That's one of the main problems I'm finding in my research about IT infrastructure investments, that most of the times the investment in IT infrastructure is not, if you like, justified in the way that any other capital investment is justified. Because capital investments have a clear cost and revenue stream; they're there, they're visible; you may have tolerance levels over what your revenue streams are going to be, but it's**

**actually there. So, is it gut feel in terms of investment appraisal? Is it a matter of convincing and selling the idea? Where does the investment appraisal come in there?**

37. MG – It's not gut feel. To a very large extent, it stands in hard cash; so the need is driven by either to avoid failure or to increase efficiency and reduce costs. In the case of increasing efficiency and reducing cost, there's a hard set of measures that the IT Director *must* be able to put on the table. But typically, they tend to be longer term. Investment over a new hardware platform is going to be depreciated over 5-7 years. So, you're looking at a 5-7 years business case. Delivering a new mortgage product is instant. So, that's the first hurdle for people to get there, to get their mind over. Typically there's large upfront investment, and therefore it *is* going to be competing with, for instance, the new mortgage product that everybody wants. And because it's over 5-7 years, it's an easier decision to defer; and that is where the IT Director needs to have a very clear sense of what the return on business is going to be, and typically, if you're looking to a 5-7 year period, somewhere along that line, inevitably, the "it's going to fail" factor comes in.
38. And the IT Director needs to know pretty well where that is and needs to be able to articulate back to the rest of the Board what the cost of that failure is likely to be. And the cost of that failure, typically, is going to be far larger than the benefits accrued from the launch of a new mortgage product. So when I first joined the organisation, we were actually going to make more headlines from our service *not* being available that we ever were from the launch of a new product, because we're now a serious player. And in terms of Finance, that's the mindset shift that we've been through, that we went from being a new player to serious financial services provider that half a million people depend on, in order to be able to transact their personal finances. And, as I said, the IT Director *has* to be able to articulate the cost of failure as well as the costs per MIPS or whatever other measure you want to put on there. But quite rightly, at any point in time, he *is* going to have to find the cause against a whole stream of very valid business demands for the launch of a new product. And this, for me, is back to why it's essential to have an investment appraisal Board that looks across all these initiatives and ensures that the sum of those investments is in line with the overall strategic thrust of the organisation.
39. **GS – Right. I'm aware of the time; just to move quickly to ask you one thing. Regarding the methodologies and templates that are being used for investment appraisal, there are a number of methodologies available in the literature – I can actually show you a table – [GS shows the table of IT investment appraisal methods] which claim to be IT-specific. What I'd like to ask you there, is, is there any tendency to apply any methods of IT investment appraisal, which are more geared to the IT side and that are different from the ones that you do now? I don't know if you recognise any of these methods from the table at all. What these methods actually do is more or less providing a framework for appraising, not necessarily in a hard numeric way, but in terms of different aspects that are specific to IT.**
40. MG – None of those leap out as methods that I've employed. What I *can* say is that this year we are making a number of IT investments alongside business investments and the tools, the templates and the processes for the evaluation and assessment of the IT investments are absolutely the same as those that we use for business-driven projects.
41. **GS – There are other methods like Real Options Valuation, which are looking into the value of uncertainty. Are you looking at these as well?**
42. MG – We're not at the moment; we're certainly aware of them but right now, our methods are home-spun.

43. **GS – Yes. What happens with most of the organisations is that the investment appraisal methods are being developed within the company itself because they're very contingent to the strategic fit of the firm. Before I leave you, just to ask you one or two things: we've been talking for about an hour and you know more or less what I am looking at. Do you think there are any areas regarding my subject that I am not looking into and that I should be looking into?**
44. MG – I think you've touched on this at the end, that like most things in the software engineering process, the creation and adoption of published methods and techniques just leads to greater mobility and agility when trying to assess new situations. Because although no tools are the same, actually none of them are terribly different either. So, we have got methods for most phases of the lifecycle, and in every organisation I've worked in, those have been largely home spun, largely driven from Finance.
45. **GS – Right. The other thing that I wanted to ask, is again regarding PIRs, regarding project prioritisations and so on, is there any form of documentation that you can share with me? Martin has kindly provided a very cut down version of a Business Case. Is there any other kind of documentation like PIR templates and things like that, that you can share with me?**
46. MG – Yes; are you meeting with PL?
47. **GS – Yes, on the 19<sup>th</sup>.**
48. MG – PL owns our Programme Office, and they are responsible for the governance of projects; they actually own and administer the project prioritisation and authorisation groups, the status reporting against the project, the PIRs. So, if it's OK with you, I think what would probably be best is to have your session with PL and I'm sure he'll be able to provide a comprehensive set of the templates that we use in our whole governance process.
49. **GS –That would be great. I've probably taken more of your time than I had promised. I do apologise for that.**
50. MG – Not at all; I enjoyed it.



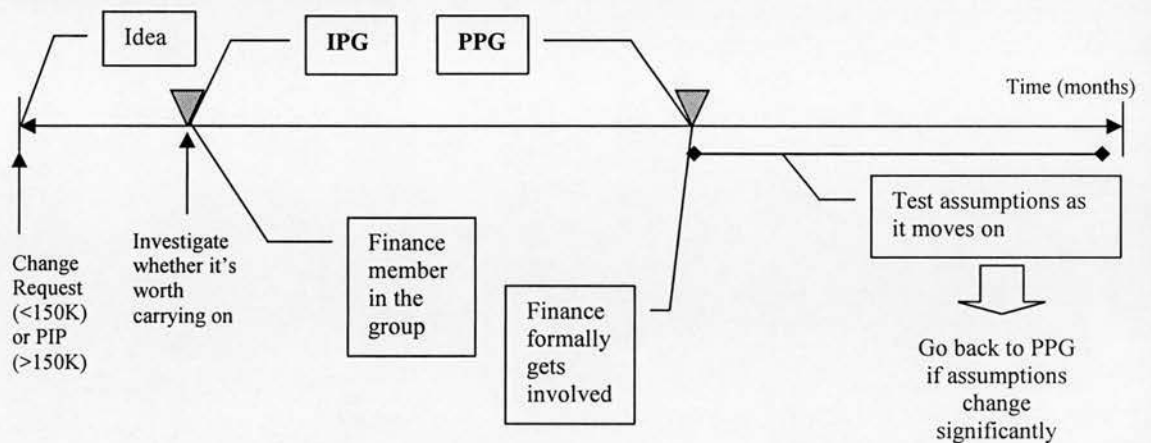
## 2.4. Interview, 21/05/2003

1. **GS – I am doing my PhD for the past three years with Edinburgh University. I am a Research Associate with the University as well; my PhD is about Internet banking; the main subject is Technology Management and what I am looking at are the processes of investment appraisal that banks, building societies or financial services providers do for Internet banking ventures. So, effectively what I am doing is to carry out semi-structured interviews with executives from banks.**
2. PL – When you say investments, what do you mean there?
3. **GS – Investment decisions on projects.**
4. PL – OK. I can talk about that certainly, since I introduced the process here.
5. **GS – Right. So, the way I'd like to play that is to just give you a brief background of myself and what I do, and then I'd like is for you to tell me a few things about your own background.**
6. PL – The information you're getting, you're going to write your thesis on; is that it?
7. **GS – Yes.**
8. PL – And that thesis is for what circulation?
9. **GS – The part that is related to interviews and information from companies is going to be confidential. Of course, you as well as other people I've talked to, will have access to this information; and there will be reports and things I would be happy to share with you.**
10. PL – Alright; but I would like to see anything that is going into the public domain that is going to reference anything I say, before it goes.
11. **GS – Yes sure. This is a standard procedure for myself. I do appreciate confidentiality issues. So, what I'd like to do is talk about the process of decision making for Internet related projects, and specifically discuss the role of the Finance function to that.**
12. PL – Maybe if I talk about the process that we go through would be helpful; and the process for any investment decision from a project perspective is the same process in many many ways; it *has* been up to now, although we are considering changing the selection criteria slightly. First of all, somebody comes up with an idea; if you take it that we started as a bank, a startup operation where there's very little ROI decisions made in terms of what we needed to do; we needed to get the business up and running as quickly as possible. The main criteria for that – at that stage – was "let's get the 80% of the customer-facing part of it as professional as possible, and let's look in to see which is the banking system we need to get done; it's an 80-20 rule; you need to get your business up and running as quickly as possible. But there's very little in terms of any decision that is made on a day to day basis, in terms of scope, what's in, what's out; very little is done. It's driven at the speed to market as such, at that stage. Following that, once you're up and running, then you want to make sure that you're getting the biggest return on your investment.
13. And efficiency and cost reduction are the main drivers; because cost is not a major factor when you're trying to get it up and running; as soon as you're up and running and things settle down, it then becomes a major factor; so the major driver in terms of change is cost reduction. So, every idea that came up, if it was below a certain

value, which was 50K, it went through selection criteria: we set up two groups: one, the initial prioritisation group (IPG) and PPG – you can ask somebody else what the letters stand for {laugh}. Where IPG is the initial group that looks at ideas in terms of saying “yes, it is worthwhile investing a bit more money to see if there is a solid business case here”, and PPG then is the decisions to say “yes, this business case makes sense”, and there tends to be people from the Exec. at that level; it’s a more senior group. And that group decides what it does need to go forward; ‘yes, this is a solid business case’ and when it should be done. What we did was we had a load of ideas; so a lot of load hanging through as you can imagine from an efficiency point of view after startup operation. So to slow things down, we’ve put a 2 to 1 ROI minimum as a selection criterion. What we’re looking at now, is saying ‘OK, go forward next year’. We need to possibly look at more customer service, as well as efficiency; not that they’re mutually exclusive – because I believe they’re not mutually exclusive; quite the opposite – but that we look to see where can we provide better service to our customers. So, I would suspect that over the coming year, you would see a lot more web development, where we will try to provide more facilities to our customers online than maybe we’ve done over that efficiency period; because efficiency has been mainly driven by working internally smarter as possible; but now efficiency *and* customer service drivers will be how can we remove some of what we do onto the web, so that the customer can do it as well themselves; so, having a double head efficiency, productivity, if you like; having a double head in terms of cost reduction and customer service.

14. **GS – Right. You’ve spoken of initial decisions where they say, for example, ‘is it worthwhile to put some more money into that product or project?’. And there is this sort of prioritisation and so on. This process, is it mainly financial? Is it mainly strategic or operational? What is the balance there?**
15. PL – It changes over time.
16. **GS – Over time, you mean over the life of the project?**
17. PL – No; over the life of the bank. As I said, we have the startup phase, then we go to efficiency phase, which is then listening to strategy; strategy, in a sense, is about reducing costs significantly, get profitable by the end of year 3. That has been our main business driver: the strategic driver and so on. So it’s very much drawn on cost reduction initiatives. Now, the market is tightening up, there’s a lot more sales initiatives and at the same time we need to maintain and reduce our costs, our unit costs. We need to continue focusing on that. We also need to focus much on customer retention; it costs five times as much to [retain a customer than to recruit one]. At the end of the day, every decision’s bottom line [is on that]. But by improving our customer service, it’s going to be much more focused on the customer service going forward now, in terms of what we do, while reducing our unit cost. So, we look at more initiatives in terms of what can bring in different types of business; we increase campaigns and so on to bring in more business, because the market is getting tighter. And you will also see us working a lot more on customer services to ensure that we retain our customers and also in terms of more internal sales activity, so that we increase our hit rate, if you like, in terms of customers using the phone, that we get a better return on those; so a conversion rate, if you like.
18. **GS – Yes. I wanted to stick more on the role of the Finance part of it.**
19. PL – Alright. Now, in terms of the two groups, maybe if I draw-up a project lifecycle – one that looks like what we have - where you can see the various binds and the role of Finance in that. {PL draws a diagram} And for the purpose of this exercise, I’ll use the waterfall method of project delivery. We vary our delivery based on the kind of the project. For this exercise, it’s the waterfall method. So, if you like, we

have a project over a timescale; let's just say it's a fairly large project, so we have several months {PL draws on the timeline}. Back here we have somebody having an idea {PL draws a point at the far left side of the timeline}. So they say that can be something that's worth doing. So what to do – depending on the size of it – they'll get an initial feeling about how big this is; and if they think it's going to be 150K, they'll raise a Change Request. If they think it's going to be greater than 150K, they'll do what they call a PIP (Project Implementation Plan). And they will write that up, and bring it to the IPG (Interim Prioritisation Group) group. The IPG group is made up of a number of different operation areas, including Finance. There's a Finance representative in there who will be concerned and say, "do these costs or do these benefits stack up?" Because it is generally a Cost-Benefit. So, they're looking to see that. For instance, costs may be hardware costs, so they'll be looking for someone from the infrastructure area to say "yes, this hardware is needed", and then they'll check with the cost. There may be developing costs and so on.



20. But included in this, especially for a large project, really what we're looking for is approval to invest in doing further investigation on this. Further analysis and design, so that we can flesh-up on our costs and benefits. But at this stage, the decision being made is "yes, it's worth doing that". So, we say it's a PIP that they're doing. You can get an example of a PIP. The best person probably to speak to is So. I don't know if you've spoken to him; he's the Programme Officer: he manages all this change process; he owns this process. So, they build a business case and it goes to PPG (Project Prioritisation Group). So, we have the Business Case, and we set ourselves a milestone here and a milestone here, which is the PPG {PL draws the 2 milestones, IPG & PPG} At that stage, before it goes to PPG, Finance will have been involved in verifying the costs and the benefits in terms of the calculation.
21. **GS – And from the IPG stage, Finance is not involved, or is it involved just as a part of the group?**
22. PL – There is a Finance person in there. Each project will have a business sponsor and a business owner; the business owner will cast with delivering the benefits. So, the business owner will say "yes, I am happy that we're going to deliver these benefits". Finance says "have we got the right cost? Have we considered all the costs? Are our calculations correct?" and so on. When it comes to PPG, you have the Business Operations person who's going to deliver the project and the sponsor saying "yes, I'm happy we can do this" and the Finance person says "yes, I've checked the figures and they stack up; the assumptions and so on are in there,

and when we turn these assumptions into financial figures, they stack up". Thereafter, assuming the project steering group has set up, but provided that the project stays within the parameters of cost-benefit and the timescale parameters. These are quoted in here. If they vary significantly, then they'll have to come back to PPG again.

23. **GS – So, is there another Change Request?**
24. PL – No, it wouldn't be another Change Request, because what you have is a Business Case at this stage, saying "this is what we're doing, this is what it's going to cost, these are the benefits we want to deliver and this is the timeline we're going to deliver the benefits over". Now, as you move on through the project, you learn more and more and some of your initial assumptions may prove to be wrong. If the doing involves significantly different costs, and I think there is a tolerance level of maybe 2-3%, or maybe 5%, if it falls outside that tolerance level, then you need to come back to PPG and tell them. Because the decision that was made by PPG was "yes, this makes sense to continue" based on certain facts and figures, certain assumptions. If those assumptions change then the whole parameters for continuing the project may have changed. Does that make sense?
25. **GS – Yes, it makes perfect sense actually. From your experience, this process you've just described – especially about Internet projects – does it often happen that you have this feedback where you move on from PPG and then you have the change of assumptions, and then they go back to PPG and so on...**
26. PL – I don't regard an Internet project being any different from any other project. The same parameters apply to all projects. So, in terms of 'does a project come back?' Yes you get the odd project coming back for approval; it's rare that a project will get canned. It's rare that we will be out by that much. But you can be out by more than 5% rather easily. So, in that case, yes, it can come back and sometimes we reduce scope... I can't remember; I think we canned one project; but that's far from being usual for a project to get canned. I think we give approval for additional spend, or someone says "no, we've got to reduce the scope" and some others may say "we need to find additional budget to take care of it". But what it means is that if you have an overall, we've only got so much budget for the year for development and for delivery of projects; that means that for it to take more budget means less budget goes to something else. So, it comes down to a business decision as to what makes the more sense from a business perspective, in terms of allocation of resources, and in terms of capitalisation; whether the costs can be capitalised if we go with that decision; so Finance will come into it and say "yes we can capitalise the costs here" or "we can't".
27. **GS – In terms of the assumptions - and I am specifically talking about Internet projects – we have seen what has happened to the perceptions about what Internet banking would deliver; and I'm sure you're aware of the notorious Booz Allen Hamilton report back in 1999 estimating huge benefits from Internet banking, which never materialised because of the fact that the assumptions were a bit unrealistic. So, in terms of the assumptions going into this phase, how have you seen this changing – especially from 1999 until now, given the economic lifecycle change of the industry?**
28. PL – I suppose, what we've seen is a steady – if not revolutionary – increase in the percentage of our customers that are using the Internet. So we have data now where we can base when we make assumptions. We have a lot more data that we can rely on to support those options, if you like. So, we're much more likely to get it right than we would have been in the early days; because in the early days it was like a shot in the dark: we wouldn't know what the uptake was going to be. I think



there are two things we can do: we haven't really focused on moving customers to the Internet, in terms of initiatives to move customers to the Internet; we're going to start doing that. Where we *do* provide a service, there is a large uptake that comes clearly on the service side, the sales side of customers who are using the Internet. I can't remember what the percentage is, but it keeps increasing all the time. And there is an increase on this type of transactions as well. So, I don't know if I am answering your question, but for me, because we have more experience, more data, we can see what the uptake rate is and it's one goal we're constantly focusing, whose focus *is* the web, in terms of that its task is to get customers onto the web, and for increasing that number and removing, if you like, costs from the contact centre onto the web, by providing additional features, additional functionality and promoting people to use the web.

29. **GS – That partly answers my question; actually, what I was effectively asking was: when for example in 1998-99 you were starting an Internet project, you were making definitely - and everybody was making – assumptions about customer uptake, cost of transaction per customer and the like; and these assumptions were changing during the life of the project, and especially as the project materialised, and the actual benefits materialised. This was a process where the calculations were done in a more 'arbitrary' basis; so there was a huge change between the assumptions that were in place at the beginning to how they were at the end of the project.**
30. PL – I'm not sure what those assumptions were back then, to be honest with you, because I wasn't here. But I'd say that wasn't all that different. You can start on the Internet and finish on the phone. Or the other way around; either way. In terms of unit costs, I think at the start, and I am sure one of the assumptions were probably even when building a big Internet bank there was the realisation that most of the business is actually going to come through the telephone. And that *did* transpire.
31. **GS – Right. Did that cause any capacity issues? Any capacity problems?**
32. PL – It did of course; well, first of all, the issue to start with was how do you train so many people; we had to make an assumption about how many people it would take to do something like this. There was 1200 phone operation staff in total at the time, when we launched. Of that, I'd say since then our contact centre has got probably to be about over 400 or thereabouts. additional??... And we had to grow the number of staff, because the value of that thing was fairly big as well. We started with two buildings here first of all, and then Livingston, and then the other site; the number of operations staff has grown significantly in that period of time; obviously because when you build the operation, service requirements for customers increase. The number of contact centre agents has probably remained fairly static, in terms of contact centre sales; they were not reduced.
33. **GS – In terms of the numbers, were these assumptions materialised? Was it better than you expected? Was it worse than you expected?**
34. PL – I think it was rather what was expected. Probably, because I wasn't involved in terms of the business side or the operational side of it, I was more involved on the IT side of it back then, I suspect, judging by what happened subsequently and the need to get more space, that probably it wasn't as much business on the web as anticipated. There was a higher percentage of the business came from indirect sources, like intermediaries, than it was anticipated, and less from direct than it was anticipated. An intermediary, traditionally, wouldn't be a strong user of the web. So, as a result, more calls and more business comes through the telephone. So, I would guess, rather than know for a fact, that we didn't get as much business

on the web as we anticipated. I think, we expected that the mix would be like 60% intermediary – 40% direct, but at the moment, it's 75% intermediary – 25% direct.

35. **GS – Do you consider this difference between the 60% you were expecting and the 75% you got, does that have to do with customer perception, PC literacy, penetration, or financial sophistication? Which one of these factors do you consider to be the most important?**
36. PL – I think computer literacy is mostly a factor. We have a specific niche market in terms of product. And if you take that niche market and look at the age demographics of the people you'll see a pretty small number of seniors on the web; they are a smaller group. But I think we *are* attracting probably a higher percentage of that group than maybe people would have. I think the product attracts people of that group as well. So I think initially, computer literacy for people who trust the web for doing their finances, I think we've overcome that at this stage. We steadily increasing the number of people who use the web.
37. **GS – Do you think that this has to do with PC literate people becoming of age and therefore of income?**
38. PL – I think it is two things. The one thing is PC literate people becoming of age. And the second thing is that the Internet being more tried and trusted; you know, the security concerns that the people used to have about the Internet, in terms of using the Internet for transactions; they're still there, but they've probably reduced.
39. **GS – Right. I would like to move on just a bit more to the relation between the investment appraisal process throughout this whole chain, if you like, and the final decision making. Is there a direct correlation there? Because, what you could claim there, especially regarding IT projects, is that they have some specific characteristics that make them slightly different from other projects – like shared nature etc...**
40. PL – You mean project that involve IT, as opposed to IT-specific projects that are invisible to the business?
41. **GS – I am effectively talking about both, but if you would like to make a distinction...**
42. PL – I think there is a distinction; because there are IT projects that are more to do with infrastructure and so on, and then, for me, there are business projects that include IT and business projects that don't include IT.
43. **GS – Yes, I see. I am more talking about business projects that include IT in that sense. So, there is the issue of what we call the 'productivity paradox' for IT. I don't know if you're familiar with this term.**
44. PL – Do you mean quantifying benefits?
45. **GS – Yes. So in that sense, you could say that, for example, the relation between the results of the investment appraisal as purely stacking up the figures with the final decision-making – which can be based mainly on a strategic or an operational drive...**
46. PL – Any of the final decisions I know were based on that figure.
47. **GS – Yes sure; what I am saying is that most of the times it is more about negotiations rather than arithmetic. Is that true?**

48. PL – For me, it's down to ownership. And if we take an example, supposing Mark Curran who is in charge of the web here, says that we need to get the more labour intensive tasks of a contact centre onto the web, then he would look at each of those and he would produce a business case for that; since I would be the sponsor from the contact centre point of view, what it would come down to is that Mark would do some work and some analysis on the design and so on, to say "we believe that we're going to get *this* benefit out of *this*; if we convert these factors of production from the contact centre onto the web". What it would come down to, at the end of the day, is that if I believe that decision, if I said "yes, I am happy that this will happen" then I *am* committing to delivering that benefit. Then I have to deliver the benefit. So, the decision comes down to ownership in that sense. Quite often, what you will find in a lot of institutions is that you will get somebody who will do the facts and the figures and everything make sense, but unless you have someone who owns the delivery of the benefit, it's not going to work at all. If this doesn't happen, the benefit will never be delivered; so, you have to be very specific about who is going to deliver that benefit over one timeframe.
49. **GS – Two things I would like to discuss in that respect. The one is, what you're saying – and you're not the only one I heard saying that – is that it is a matter of ownership; I've heard this before...**
50. PL – I've introduced the whole ownership concept here to IF. So I would be disappointed if you hadn't! {laugh}. I used to be the Head of Business Design.
51. **GS – Yes; that was the original reason MG recommended that I spoke to you. What you're saying actually, is it that the process for investment appraisal is geared to the expertise or the background of the project sponsor or owner. So, say somebody is developing a business case, and he has to convince the person who is sponsoring the project to adopt it. You know what I am saying.**
52. PL – Yes, I know what you're saying, but if I am to stand up in front of the Executive and say "I am going to deliver that benefit", to do that I would be looking for MG to stand behind the cost and the timescale for development, saying "yes, I can deliver this". I would be looking for some of my own people within the contact centre to have gone to understand the process, understand the costs currently, understand the benefit in terms of, say, what time-saving we're going to get here; and I would be looking for them to stand behind and say "yes, we believe in those time savings; we believe we've got the solution; we *will* get this benefit. Based on the percentages that we're getting on uptake in terms of customers at the moment, we *will* be able to convert *this* cost out of the contact centre and onto the web". I would be expecting the Finance to stand behind and say "if we convert that amount of time, that will equate to *this* cost saving". So, if you like, I am depending on experts in the specific fields; and I will ask each of them independently "are you happy that you can commit to this?" Then, if all of those people commit, I can say "yes, I am happy that I can commit to this, and I believe it will happen". And then it is up to me to prioritise things and present it to the group and say "that makes perfect sense".
53. **GS – Right, I see. The second thing I was referring to; speaking of the ownership of benefits, there was something that I discussed with JM as well: my opinion is that ownership of benefits sometimes may cause some sort of reluctance, if you like, for someone to adopt things like intangible benefits, which may well prove to be a major driver of success for a project. I guess that this is something that needs to be tackled.**
54. PL – It's not something that we would have to face too much so far; it's more of an issue in a more well established company. Because, we have been into this because of that we're a new business, that allows a more low hanging throat?? But

absolutely, when you move to customer service for instance, it becomes less tangible; we will measure customer service in terms of, you know, what problem are we trying to deal with; we should resolve them in an improvement in customer retention, and we should improve them in terms of reduction of complaints, the number of complaints of a specific type that we get. But it is less tangible; it's less certain. So, I think it depends on the strategic drive of the company; I know that this year we are much more focused in customer service; so the relaxation of the 2 for 1 ROI will, I believe, happen. I've suggested already at the last PPG that we needed to get rid of that, and that we will be making decisions on less tangible results; it's a no-brainer, for instance, for customer service. And I think we are starting to move to that direction.

55. **GS – What is the main driver for making you move? Is it a change in the market, or is it a matter of maturity of the company?**
56. PL – I think there are three factors: One is the change in the market; if you like, there's new business we need to get customers in. The market is tightening up, so we need to provide better service so that we attract more customers. We have a better chance of succeeding with the customer if we offer [better service]. The second one is that we're very much focused on retaining our customers now; initially we were starting a business, so customer retention was not as much a focus; the focus was to get the customers in. Now we started maturing, so we need to focus on retaining our customers. So decisions on customer service is the main driver on that. I think the third factor is that we have grabbed the lot of the (easier to get hold of you) low hanging fruit... [37.15]... in terms of efficiency, so it's harder to get the efficiency ones but customer service and efficiency go hand in hand; so we believe that by delivering an improved customer service, we also improve our efficiency; it's much more difficult to prove because it means that our customer is not calling us back as much: we're better at servicing customers, so we reduce the number of calls. Pretty hard to measure in the improvements front, but it's more of a common sense. And probably the last factor is that from a group perspective, strategically the group wants to improve its image in terms of customer service; so the HBOS group has been focusing on customer service and there is a group-wide initiative about this.
57. **GS – I'd like to stick for a while to intangibles, and bring you a few examples; things that are quite difficult to measure, things like, for example, when you build an IT infrastructure, you have some kind of flexibility built into that, scalability and so on. Is this something that you consciously take into account in the financial appraisal? For example, benefits of IT, like the rationalisation of layout, in some cases.**
58. PL – We've made a conscious decision at the start of the year, that we want to set so much aside for application improvements and for infrastructure and so on, so that we are addressing scalability problems; we are addressing improvements. We're writing some of the code that is initially introduced in such a hurry, so that we can respond more quickly to business needs. And then there was a third section; it was our proprietary section. And it was that budget that goes through this process of decisions, if you know what I mean.
59. **GS – What I was more talking about is unanticipated benefits, or unanticipated costs, if you like...**
60. PL – I think the latter more than the former {laugh}
61. **GS – I know of examples where unanticipated benefits were more important in such IT infrastructure decisions. From your experience, did you have any**



such instances? Especially unanticipated benefits, like for example, when you introduce a new IT infrastructure, you have some relocation of staff and retraining – which of course is an additional cost – but then you get benefits from adapting your applications to specific needs and moving tedious tasks away from the call centres, and thus gearing this staff to more sales-oriented or more productive tasks for the firm. Did you have any examples of these?

62. PL – I'm sure there are many examples of them. Initially a system that was designed for one purpose, we certainly would find another purpose for it that would add additional efficiency to it; as in our commission system. As I look forward, our commission system is very very good; it is very well designed. As more of our people become more sales focused in the contact centre, that I will be able to put them on the commission system and give them an incentive, so we can roar our performance. Our performance is based on the value of business; at the moment they get a salary and a bonus based on performance, but as we become more and more sales-focused in terms of contact centre sales, as we have to, we need to make every call count; this is our slogan at the moment. To do that, we need to develop our sales capability. To do that, we need to motivate staff; one of the things we found is that the commission system actually fits perfectly to what we're trying to do, while it was not initially intended like that. I don't know if this sort of example is something that you were talking about. I am sure there are lots of examples, but I can't think of any more just now.
63. **GS – Right. One important thing about investment appraisal is its relation to financial reporting; and I am talking about PLAs and so on. In some instances, you can claim for example that reporting and what is reported to the stock market – which is what a firm is being judged by – is driving and is defining what you need to take account of in your investment appraisal of just any project. Do you see that happening?**
64. PL – It was a major thing. Our strategic driver, which was driven by market perception, was that we get profit month on month by the end of year three; now that very much drove all of our decisions over the last year in terms of what projects we do and what projects we don't do, because we had a very strong point: trying to find the balance in terms of that, you know, we need to develop for the future the sort of infrastructure you were talking about, and making sure that we're scalable and so on; we have to take care of that, but we also have to make sure that any project that was carried out and any effort that we made needed a quick ROI; projects based on a longer term investment probably wouldn't get the same notice because of the need to break even.
65. **GS – Isn't that introducing some sort of 'short-termism'?**
66. PL – It *could* be argued, but I think it also brought some very good practicing disciplines around cost. If you look at an investment on IT that is traditionally – I don't know what the percentage is now – but it used to be around 80% of investment on IT that would be wasted. With this sort of discipline, I would say the investment on IT would still be partly wasted, but it will be a much smaller percentage. The reason that I believe there is this 80% waste in IT is the lack of this sort of discipline, and this sort of focus. What it made us do was really to focus on the [shorter term]. It would be short termism if we decided not to do any planning for the longer term. There is no way that we can get profit in, month on month, this year if we're not going to be profitable. Subsequently, we couldn't get really off the scalability problems or whatever. So, what it made us focus on, well, in terms of the future and the future scalability, "what is it that we need to do?" And be very very disciplined in terms of saying "no, we don't need to do that".

67. **GS – Right. But doesn't this discipline in some ways underplay the long term and overstress the short term?**
68. PL – It *can* do, if we were not strong advocates of taking care of the future.
69. **GS – What usually happens with IT infrastructure is that, as you very well know, if you focus on the next two years or so, you then build a system, and if you don't, as you said, take care of the future, then you end up with huge scalability or even replacement needs.**
70. PL – When you're implementing IT, regardless of the length of your focus you're in that anyway. If you look at companies that first went into IT, they're the ones that struggle most to respond invariably. So, I'm always in the place to say that no system should last beyond 4-5 years; it should be fully replaced. Now, that is a very brave thing to do; but if you look at generally what happens, is that IT is moving so fast and changing so fast, that maybe it's folly to suggest that you can plan for 5-10 years ahead in IT terms.
71. **GS – Right. I would like to speak a bit about methodologies for investment appraisal; what I have seen coming quite strongly, by speaking to about 30 executives in different banks in the UK, is that people are quite happy with the existing financial methods like the NPVs and the IRRs and so on. As a person that is more involved in the business and IT side as well, do you believe that these methods and the ways they're being used accommodate your needs for investment appraisal? Do you see a need for developing something more integrated?**
72. PL – I think any methodology, any process is simply that method or process. How we use them is really around the ownership of the individuals. What you will find in most institutions is a lack of ownership. You will find good process, good methodologies but lack of real ownership. Key to any investment decision is the ownership of costs and benefits, whichever methodology you use. I am not a great believer in methodologies. I think people can become too easily slave-to-process and slave-to-methodologies. I do believe that methodologies are good in terms of providing a guideline.
73. **GS – Yes. That is exactly the way I am using the term methodology, rather than as a black box.**
74. PL – Yes, you get this input-output approach: "this is what you should get; if no one is delivering it then it doesn't exist".
75. **GS – There is quite a great number of methods in the literature that are more, if you like, geared to IT...**
76. PL – I don't have a lot of experience of them, to be honest. For me, it comes down to very simply "what's the going cost? What are the benefits going to be over what timeframe? When will it capitalise?" And it comes down to a straight business decision. From a financial perspective, there may be a number of projects that are more customer service related that are less to do with financials. But at the end of the day, there *is* a financial concern. It comes down to – even where it is less tangible – 'are we going to get a return on this investment?' in whatever shape or form this may be. You know, it could be a regulatory compliance project, it could be a customer service type of project, or it could be a productivity efficiency type of project.

77. **GS – So, you don't really see a need for allocating resource to developing further processes or further methods; adapting existing methods to the needs of the company.**
78. PL – No; I invented the process here; I think, if anything, we've become too much slave to process; I think we need to apply common sense more, and not be slaves to process. Like any process, for 80% of it there is 20% that needs to be set out of the process. Somebody with experience would say "yes, we can go and calculate all this but we know it does make perfect sense", because we can quickly go through the bureaucracy, of you like, and get there. I think the more tools and the more methodologies you use, you increase the likelihood of bureaucracy.
79. **GS – Right. I see what you mean. One final thing I would like to ask you is that increasingly in the past years, there is this talk about Knowledge Management, and there are people who claim that valuing your knowledge assets, or even evaluating them and putting a financial metric on them, is something that is becoming, if you like, of age or of worthiness. Do you think that this is true? Do you take account of your knowledge assets?**
80. PL – I'm trying to, increasingly. I think what you'll find in large financial institutions is process, procedures and tools that promote mediocrity. The larger the organisation, it tends to support under-achievers and not reward high achievers sufficiently. It doesn't tend to be good assessment around value. It's always in the same frame as I put it on methodologies and tools before. What is value? For me, value is the difference between the benefit and the cost; and that is applied to an individual as well. So, quite often, we don't have that level of simplicity; and quite often it is because people get into the processes of analysing all sorts of information. And it is difficult because so many times the value is intangible, or very difficult to measure. And you can spend a large amount of effort trying to measure it when it is very obvious that an individual is producing value. In other areas, where it is easy to measure, people don't do it; like, for instance, in sales you can say "yes, you've done a good job". The value is more direct. So you've got both extremes. I will have to go.
81. **GS – Alright. One final thing: do you think from what we have been talking about that there are any areas that I'm missing out?**
82. PL – Possibly more of a focus on the key influence of people, the key influencers in an organisation. We have strategy, and strategy is just a reflection of somebody's opinion. Is strategy a once-off yearly exercise? Or is it an ongoing exercise in terms of contingency? I don't believe you can separate strategy out; where the market is changing and the business is changing, you need a constant strategic conversation and process. There is something for me slightly more on people, because projects are about people: you can run the same project in six different companies and it will be six different costs, six different benefits for the same project. And this comes down to people. It's the people equation more in the middle of it. And also possibly something about coordination of costs etc. Maybe you could do a little bit more on that.
83. **GS – Right. That's great. A final thing: is there any form of documentation relevant to what we have been talking about that you would be able to provide? For example, PIRs or anything like it?**
84. PL – I don't have any myself. SW is the Programme Officer. I will talk to him and ask him to check what we can currently release; he would show you diagrams, PIRs and a lot more. He reports to JM.
85. **GS – Right. Thank you very much for that. Sorry for taking just a bit longer.**

86. PL – No problem.



## 2.5. Interview, 22/08/2003

1. **GS – How much time do you have?**
2. SW – Typically, how long have you discussed with others?
3. **GS – Typically it is about an hour or so; it's not more than an hour and it actually depends.**
4. SW – It may be that I may have to go out of here in about 45 minutes.
5. **GS – OK, I'll try then to fit it in that time! So, let me start by saying a few things about my own background and where I stand. I am originally an Electronic Engineer, worked in telecoms for a few years back in Greece where I come from; I did my MBA here with Edinburgh University, and I am currently a Research Associate with the University, doing this PhD for the past 3 and a half years. What I am dealing with – the main subject – is technology management. What I am looking at is the processes of investment appraisal in banks specifically for appraising Internet banking projects. In so doing I am conducting interviews with executives from a number of banks, including the people I mentioned before in IF. So, this there are a few aspects I would like to discuss with you, mainly regarding the investment appraisal processes and the role of Finance and Accounting, but also other things like expertise development in places like IF, where the Internet is one of the pertinent channels. So, would you like to tell me a few things about your own background, and we'll get on with the discussion?**
6. SW – Sure. I've been in Change Management working on projects in Financial Services now for ...somebody was asking me about it this morning and I actually haven't yet figured it out ... certainly for about twelve years to about sixteen years... I'll have to work this out... But certainly for the past period of time I worked for Lloyds TSB, National Australia Group, always working in Change Management, and in fact in my last two organisations implementing a Change Management process; in the last organisation, we implemented Prince II where we designed a Change Management methodology, because they were spending vast amounts of money on a significant change and it wasn't controlled; there was no appraisal or cost-benefit, so we needed to put-in a process around that. So, it was a whole change management framework underpinned and supported by the methodology. So, my background has always been in that, and process re-engineering.
7. **GS – Right. How long ago did you join IF?**
8. SW – I joined IF in March last year, March 2002.
9. **GS – In terms of processes, which is mainly what I wanted to talk about, processes for evaluation and appraisal, what were the gaps back then in IF that you were trying to cover? I don't know if this is a confidential question.**
10. SW – In fact, I was about to ask you and I am conscious of the recorder and conscious about the confidentiality aspects, because I was recruited specifically as Programme Office Manager now; I was working on a previous company and the last company I was working in, I've been recruited by them, where the Directors of the company knew of my work and we'd worked together briefly; this was National Australia Group, where I was doing sort of an internal consultancy with National Australia Group and was doing some re-engineering to migrate the four UK banks onto a common platform, common business process. So, I was invited to join *that* company – it was a student loans company, to develop a re-engineered model

- under modernising government. So, that had always been my background and so, when I was approached and told that there is a Programme Office Manager role in IF, I got interested and my first reaction was "why they are asking me?"
11. Because I am not a Programme Office Manager; the conventional Programme Office is very much a standards and governance monitoring facility, and certainly as a Change Manager, I've worked with good Programme Officers and Programme Officers I could have well done without. So I've gone and talked to them, and what I found was that what I was actually asked to do was to establish some control and rigour around the whole change management process, and build a team who is capable of helping the business to change forward; so, it is about proactive programme management. Now, before I go any further, I came to a situation where I had to make an assessment and introduce investment appraisal; there wasn't any CBA but that was indicative of the stage of the company...how confidential is this?
  12. **GS – It is as confidential as you wish it to be. Let me explain: my interviews are going into my PhD appendix, which is confidential. Furthermore I am not mentioning any names of banks or individuals; instead I am using things like Company A, Company B etc. So, it is as confidential as you want it to be; same with documentation.**
  13. SW – OK. Well, we're not in the same place now anyway, so... my take is that the organisation has done a stunning job of building a banking platform in nine months; launching in nine months a full functioning platform... nobody has ever done that before. And I suppose the first year of operation was focused on bedding down I suppose what I would call a blizzard of very small incremental changes like fixes and tweaks that people were requesting; there was a huge volume of very small scale changes. As the platform stabilised through the first year, there were just one or two significant pieces of work and they were managed as projects; but they were the exception, rather than the rule. What I mean by 'managed like projects' is that they had a defined shape: there was documentation and so on, there were business cases but the business case was more of a 'we need to do this – how do we make it happen?' It was 'is this the right thing to do? Or is *this* more preferable?'
  14. And the Executive had realised that we needed to move away from the start-up culture and introduce some rigour and discipline around the whole change management process; and so, Boston Consulting were brought in to assess the change demand and helped to define a change programme that promised to deliver breakeven to the bank, on the basis that all these programmes, all these projects were undertaken. So that programme was kicked off on January last year; I arrived around the end of February, beginning of March, and at the time there were an excess of fifty projects. My first reaction, coming from change management, was that this was very interesting. I wanted to know 'how do you manage change?' 'What is your change management methodology?' and I needed to get up to speed with this really quickly and I needed to understand what was the capability of the people that drive the change. So, at one level, I thought 'you must have a lot of project managers out there!' The problem was that Boston had made very very high-level assumptions and estimates and hadn't had a challenge process; there was no challenge process. The problem was that there were a while series of projects waiting to be kicked off in the next three months; and I made an assessment within the first three weeks and Jim Spowart – then CEO – said that we really need to take a very serious look at this and that there was insufficient rigour on this project. So, what I agreed with Jim and the Executive, we got the Executive together – it was my third week in the company – and we went through the change programme and identified sixteen high priority projects.
  15. And I introduced... although within the HBOS Group there was a CBA that hadn't been applied, but I introduced an approach to CBA that took into account, not just the financials, but the non-financial impacts of projects; that sort of non-quantifiable, non-financial type, maybe business risk or brand image, service

quality and customer experience... and to enable the Executive to work out what the priorities were. So, we then introduced a process by which we required everybody to produce business cases for these projects; we set up a change forum, an executive forum to review and challenge the business cases and the level of challenge and scrutiny was very high in terms of everything in the assumptions in the business cases. And that really rocketed up the quality of the business cases because people realised that 'if I am going to stand in front of this group and present that business case'...

16. **GS – Is that still the case? Was this a permanent process?**

17. SW – Yes, we have... the change management lifecycle – I don't know if anybody has talked you through that – but at this particular point we have what we call an approval process; this is an initiation phase... we've been working on that; we've been refining that as well... when somebody gets a piece of work into the radar, so that folks can begin working on developing a business case, development of the business case is going through what we call the 'Approval Phase' on the project lifecycle, and this concludes with an evaluation. We have a group called the Initial Prioritisation Group (IPG). Now they were brought in because we were initially... we established the PPG, this was the formal Project Prioritisation Group, and to get through this backlog of cases, we're meeting every week, and sometimes sitting into the Unit.

18. And a few of us realised that the reason why we were sitting there was that we were focusing on the quality of the documentation and the quality of the submission and that we've got everything covered. So, we did a couple of things; one was to push back in terms of ensuring mandatory silos of circulation of the documents, before they even *got* to the committee; before the sponsor had signed off. But also we established the IPG and said 'your role is to ensure the quality of the documentation'. So, the IPG focuses on whether the documentation meets the minimum standards whether the business case met the minimum criteria – because we said 'we set a hurdle rate. There is no point in bringing a case to the table unless the return exceeds this threshold' to ensure that the case... we'll kick it around and make sure that it is robust. Once the IPG had approved this, as a substantial business case, it will then be submitted to PPG who could then focus on the value debate: 'Is this something we want to be doing in terms of aligning with the business priorities and the business strategy?' So, in terms of the investment appraisal, we really made a lot of progress within the first six months and by the end of the six months, we had a very solid Change Programme, very firm business cases, understanding what we were delivering, why we were doing these projects and not others. And we ended up in this situation because of the appraisal process...

19. I was able to go back to Jim and we had another group that meets every quarter, that we call Overall Scheme Group chaired by the CEO, and the role of this team is really to maintain an oversight on the overall direction of the change programme. So, we were able to go back to Jim and say, "well, not only do we have many many fewer projects that are all doable, but also they're delivering more benefit than the original fifty plus projects prior to this, at less cost." Because the process had enabled us to look at a business case and say, "well, this is a great business case but actually 80% of the cost...the 80-20 rule. Kill that. We'll have 80% benefit for 20% of the cost; go back and rewrite your business case". So, it was a very tough process.

20. **GS – I see. There is one conclusion – well not actually one of the most robust conclusions that I've made but something that crops up when talking to people. Each project has a business sponsor and so on. And we are talking about the investment appraisal process. Is it true that actually what you are using in your CBA – because CBA has some assumptions built into it – is geared to the sponsor's background and expertise? For example, you have a**



**group that is trying to push a project forward, and they have a sponsor that comes from, say, the Marketing Group. Won't there be a tendency on behalf of the project group to overstress the costs and benefits on the marketing side?**

21. SW – But that's why there is the scrutiny. I think there are two things there: one is... the model, the vision that I have in my head and that we're aiming for – and we're pretty much there – is that there is a clear statement of our strategic objectives; What is success in market terms and what are the measures of success? Now we have a number of KPIs that you must be familiar with, Key Performance Indicators that we define. 'This is where we're heading as an organisation, and these are our strategic objectives'. How do we know whether we're heading in the right direction? What are the measures of success? Who owns those measures of success? Well, the Marketing Director will hold the measures that are associated with certain product features, like product penetration, market penetration etc. Operations is likely to hold some aspects of KPIs to do with unit cost and productivity. There is a natural ownership; so clearly, the next question is 'if you've got to get from X to Y in terms of productivity, where the Operations get in, or if you've got to get from X to Y in terms of income generation for the Marketing Director, what changes do you need to introduce into this organisation to make that happen?' So, they're going to come to the table with propositions that are directly aligned to their area of responsibility. And that is coming quite natural.
22. The second thing is that... and what it does is that it provides a line of sight, so when we ask why should we be doing this particular project and why should we be introducing this new functionality on this product, there is this line of sight through the individual Directors' KPIs, the sponsors' KPIs through to the corporate objectives. 'If we want to be this kind of organisation, then we need this'. This is the stepping-stone. The second thing is that it's going to be natural that anybody when they're making a case for anything, they'll have a tendency to maybe overstate things and we've seen some of that. It seems to me that what we rely on in these circumstances is some healthy scepticism. However, the other thing that we rely on is the bit of reality on the part of the sponsor, to say "well, if I am going to the table to say that I believe my initiative ought to be funded as opposed to somebody else's initiative, then I am going to beef up my business case to make it look much more effective". What we're also asking that sponsor to do is to come back and demonstrate to his or her colleagues that they have actually claimed those benefits. So, closing the loop, in fact, what is happening with some of these business cases – and we were talking about this yesterday with the Executive, because it has already been happening – is that when a business case is approved, there's somebody saying "you give me this project, and I will make productivity savings equivalent to 85 FTE". That's great; proven business case, finance, modify their budgets, take the money out". So they already lose... they've got to make the project work, so they've already lost the funding for those 85 FTEs. So, it tends to focus the mind.
23. **GS – Right. Another thing that is along the same line of thinking, is the aspect of accountability and benefits ownership. Especially in IT and Internet projects – and you probably know that better than I do – much of the benefit is what we call intangible or immeasurable; things that are hard to measure, so...**
24. SW – It depends what IT though, isn't it? If you're talking about IT where you're implementing an infrastructural system such as when you're upgrading an e-mail system, it *might* be difficult to measure the benefit; you can put some figures to it but you have some assumptions there.



25. **GS – Yes, but again, if you are talking about a customer-facing IT system like Internet banking and so on, you always have to make assumptions about uptake, retention, customer recruitment and all these things. So what you have is some kind of benefits ownership from what I gather from talking to JM. Isn't that sometimes work as an impediment to some manager or project manager to try and own an intangible benefit that may be or may prove very very important, but on the other hand if you own it then you have to deliver it. So, if you understand what I mean, it is like closing the scope for identifying new types of benefits that haven't been taken into account before and thus improving the investment appraisal process.**
26. SW – I think I have to get an example so that I can understand what you mean.
27. **GS – If you have a project like most customer-facing IT projects where you have benefits from say a bank setting up the customer-facing part and in so doing has to go to its back-office system and someone discovers that they have to rationalise their back-office system and in some way that brings benefits that are company-wide. You improve processes for data entry and this kind of thing. This benefit is something that, as it mainly happens, is identified ex-post, after it happens.**
28. SW – Well, I don't see why it should be because I would argue that there's nothing you've mentioned there is not subject to measurement and assessment. The reason I'm saying that is that what we have is a concept of business ownership in the sense that apart from infrastructural IT changes, which are needed to upgrade a platform, to upgrade software because it is business continuity and service assumed to maintain the show on the road, our change programme is driven from those and the Executive say "well, what have you got to achieve here?" So, a budget is found, or we need to know what the budget is that we have to spend on that change. So, what are the changes that you require? Whether those changes involve IT change, then there is therefore a very clear line of sight. So, if they're wanting to improve - on the one hand it tends to get measured otherwise – productivity cost savings, or if they're wanting to improve income generation, to increase sales for whatever reason, either because we're changing our sales process, so that we're rather dealing with ...[short interruption – PA enters room]... so, in terms of sales it could be that the initiative is to increase income, or it could be quality and trying to improve the quality of the experience of the customer, or improve the brand in some way; all those are in some way quantifiable. Now, I believe that there are non-quantifiable and intangible benefits, but it is very difficult to make a case on them. It is very difficult.
29. **GS – Again, yes it is very difficult to make a case on them, but they still exist. That is why I am discussing these aspects...**
30. SW – I don't think that you lose sight of them, but the reason why... if you bring something to the table, then it has to be persuasive. And if they say "look, this is going to make a big impact to the customer experience", they have to make a case which says 'evidence is that if we change the interface in this way, we will have an increased number of hits, or an increased rate of conversions or whatever comes to be'. So, immediately, it becomes something that you can measure.
31. **GS – Yes, but again you always have to work on certain assumptions. One example comes from one of the major banks I've been talking to, when they went into Internet banking, what they thought this would immediately do was to drop the number of calls that they got in their call centres. What it effectively did was to increase the number of calls...**
32. SW – Yes this is typical...

33. **GS – Back then, it was a wrong assumption if you like.**
34. SW – But that is not intangible. That's were the basis of the business case was incorrect. That's were they say 'our assumptions were wrong' and that's why the scrutiny is important, when someone comes to say 'OK, you're saying that this is a good thing for us to do because X or Y. We need to understand the reasoning behind that and you need to convince us that this is the right thing'. So, that scrutiny... and if people are making assumptions that's where you look at the level of business risk associated and say, 'OK, well, the risk is such that I think we need a bit more persuasion here; you need to do a bit more research to come back to substantiate your assumptions'. I remember when I was at TSB and TSB introduced telephone banking at the time, everyone was talking about how telephone banking would reduce the cost, the total cost of the organisation, the operating costs, because they thought 'oh well, what we'll do is migrate the transactions from the branch to the telephone'. Of course what it did was change customer behaviour and people did many many more transactions.
35. So, that was where we said 'Oops, we got it wrong' but it is still measurable. So, I think in terms of the ownership, going back to the point about ownership, the value of that is more about saying... is about closing the circle really. If you're saying 'why do we need this?' and there's somebody saying "Well, I'm making the case that this ought to be... this change ought to be promoted, as opposed to all these other things that are going to get pushed off the list, because we cannot do everything, because it will help us achieve that target that we set ourselves. And it will get us *this* far towards the target. I am committed to increase sales or whatever it is". It's important to have somebody who owns that, which is "OK, now, we've delivered the change to you; it's now down to you to deliver the benefits". That's what tends to happen; otherwise it is that people think that the project is concluded when it's gone live. And I've seen this in other banks as well in that past. A huge investment was put into a particular change into a development and the project is considered to be successful when the technology is working! That's *not* what it's about! And we had a conversation...I'll give you an example about this business ownership, I guess: we had a conversation in one of the steering groups where we were talking about implementing a change here, that was going to affect everybody in this particular working area; and we were talking about several hundred people. And the discussion was, you know, a bit of razzmatazz, to celebrate the success of this project.
36. So it was when do we celebrate it, because the technology was actually going to roll out to those different teams over a period of time; so, it's going in on a Saturday and somebody said 'I think we should celebrate in the Monday morning, because most people are coming on Monday; they're not going to be there on a Sunday' and the discussion went on, but hang on a minute! This project isn't about delivering the technology. The project is about using the technology to change the behaviour of teams. And so we discussed that, and we said actually the conclusion was, "right, we celebrate when we've seen the behaviour change in teams and we can sign off the teams as now performing the way that we wanted them to perform". And that was really about recognising at that point that we've claimed the benefits.
37. **GS – I see. Probably I'll have to move on pretty quickly because of time. One of the main things I'm looking into is the role of Finance, and I'd like just to get straight to the measurement techniques and methods. Have you seen these changing at all? I mean the NPVs and the IRRs and everything; have you seen the actual methods changing through time in IF? The methods that they use, the methodologies.**
38. SW – Yes... I remember I was saying that the last year, that year, we had a lot of projects that were defined but lacked rigour, and we pulled back and decided that

we need to produce the business cases here. With Finance, I introduced a new assessment model which... we happened to use a Boston matrix – not Boston Consulting but this type of matrix – to assess the cost-benefit, the NPV versus the non-quantifiable benefits because the worst of those projects were... the NPV was so subdued that this project were never going to pay for itself, but there were actually very very good reasons for doing this, non-quantifiable; it was a bit like you said. You know it's a platform issue and one needs to build a very simple way of being able to compare these things. Since that time, Finance have improved and refined the CBA, particularly with regard, for example... well we focused on if somebody is saying, "I am delivering 85 FTEs", we want to know *exactly* how. Where is the budget that will be impacted, we don't release people; it's redeployment and we allow attrition to work here. So, the question is how are you going to redeploy these people so... the refinement is to get to increase the rigour so there is clarity about what will happen when this thing goes in. So, where will people move from where, to where? And that cost-benefit assessment... in words "are those FTEs actually claimable? Is it real benefit? Do we believe it will happen?" So, in terms of the techniques that are used, one of the things that I've seen in the past, is that the whole process, we are constantly revising it. We have a focus group that meets... at the moment we meet every two weeks to review the change management process. And its entirety is to feed back improvements. We've also increased tremendously the rigour around cost management *within* projects; once a budget is assigned, we manage against the budget. In some cases, we almost manage against the profile budget but we're not quite there yet; but we're getting there. So, there's constant change.

39. **GS – Regarding technology projects, is there an appraisal method that you apply specifically to IT relevant projects? Or is it...**
40. SW – That's another change. We are... initially we had to focus on that, because that was the major constraint, but we are beginning to apply this approach to other types of business change, and it's back to my own reporting regime; the other thing that is changing in terms of the measurement is identifying upfront *how* you're going to measure the benefits. I've seen previously a business case where you think "look! Actually it looks fine. We've got measurable tangible objectives here; we're going to increase this by 10%" or whatever it happens to be. But then you find that there is no baseline, so we don't know where we started from. And we've got no method of measuring it anyway. So we moved away from that. So, it is to think upfront and declare *how* things are going to be measured and what the baseline, the starting point is.
41. **GS – Again, in terms of applying all the methodologies and so on, in the projects that you came across, either in IF or elsewhere, in terms again of costs and benefits there is the process of identifying which ones are the costs, which ones are the benefits, by how much and so on. Has it ever happened that there were unanticipated benefits or even unanticipated costs that made a significant impact? And which ones were these?**
42. SW – Well, in terms of the costs and benefits, the process is that there is a tolerance level, so that if costs and benefits vary by greater than the tolerance, then it has to come back into the appraisal group, the PPG. In certain cases... I haven't seen this of like but, in some cases, and I can talk hypothetically, I am trying to get a good example... there have been instances where the costs have been greater than anticipated in the business case, simply because of insufficient knowledge of the system prior to the business case. The challenge is, as with any organisation, to put the appropriate level of analysis into the business case; because otherwise you may find yourself doing a lot of inside analysis before you've actually had a 'go or no-go' decision. And all these are sunk costs. So, it's about having the appropriate level of analysis and design to enable the business



case to be robust enough. What we are doing again, is recognising that we need to have staged approvals, so, "on the basis of what you're telling us so far, it looks good, but go back, do a bit more work and then come back to us", rather than have it in one go. So, we're moving towards that. It's difficult to answer that question because it is such a generic question. In terms of other additional benefits, I think yes. I think sometimes, in some of the projects it's actually around the non-quantifiable benefits; you know, the impact on people that is not anticipated. You expect things to go well in one case, but actually the response and the impact on morale has been far greater than expected. In terms of financial benefits, we've got an example where the project team is finding that they are delivering far more benefits than they thought; and that was simply because the scale of the opportunity was such, and as they've gone through the design and they've understood more about the business, they can say "Oh! We have a lot more to claim than we anticipated!" So, yes, that does happen.

43. **GS – Is there always a post-implementation review in that respect?**

44. SW – Yes. Well, that's another discipline that we've been introducing. The PIR is twofold: one, we focus on a PIR which is capturing what went well and what didn't go well, for our overall continuous improvement in a project; we also have a Benefits Realisation Review, which is to say "Did the project achieve what it set out to achieve? Has it delivered the benefits?" So the PIR therefore is really the concern of the project manager to gather the team together and say "OK, let's look at the strengths and weaknesses, what went wrong, what were the learnings, what was it exactly that we did well and modified in this project and we ought to pick up as a good practice for other projects? What are the lessons learned?" The Business Owner, who will be somebody who is in the business line, who's responsible for the benefits, is the person who is responsible and accountable for the Benefits Realisation Review.

45. **GS – I realise that it is time.**

46. SW – I mean, that has been fairly brief, I guess, from your point of view, but I hope that this helps.

47. **GS – Oh yes, it *is* helpful. It's just that there are many things that I wanted to discuss. Maybe, I don't know whether it would be convenient at all to hold another half an hour over the phone or something like that; I don't know if that would be OK.**

48. SW – I can do that. It depends on the timescales. The time is not so good at the time; but I don't mind having another chat, that is if you feel that you're getting some value.

49. **GS – No, I *am* getting value, and there are aspects that we didn't touch on; things like expertise and power and things that have to do with the actual decision making...**

50. SW – Accountability.

51. **GS – Yes, accountability and all that lot.**

52. SW – Again those are other things that we're heading to. I've had presentations and we've been discussing in the Executive about firming up some of the roles. It has been an interesting experience the last year now, because it is very much taking an organisation, which is of tremendous dynamism, and enterprise and commitment and trying to apply, in an incremental way, design a change management solution that fits. What we *don't* want to do is to take a solution off



the shelf and say "Right, this is the way we're going to do it here" What we do want to do is incrementally respond to the business need. And so it has been an ongoing process of development.

- 53. **GS – Right. Another thing I wanted to discuss if we get the time is the valuation of knowledge assets. KAV, which is ...**
- 54. SW – Yes, I am familiar with that; we don't use that here.
- 55. **GS – Final thing before you go. I have been handed some documentation but I don't know whether there would be anything additional that you would be able to provide. I have the IPG and PPG agendas and the outcomes and actions templates. I am treating all these confidentially.**
- 56. SW – I could. I'll have a chat with JM to see if she's comfortable about that.
- 57. **GS – If you have anything about the investment appraisal template that would be great.**
- 58. SW – Again, I'll have to check.
- 59. **GS – OK. Thank you very much for your time. Sorry for keeping you longer. It was very nice talking to you.**
- 60. SW – No, it's alright. Nice talking to you too.

### 3. **EGG PLC.**

### 3.1. Telephone Interview, 4/06/2002

1. **GS – First of all, as we haven't had the chance to meet before, I'd like to tell you a few things about my own background, then move on where I'd like you to say a few things about where you come from, and then begin the discussion. I am originally an electronic engineer; I graduated in Greece, I did an MSc in Telecoms, I worked in telecoms for 3 years in Greece as a networks engineer actually; then I took an MBA here in Edinburgh; I'm currently doing my PhD and working for the University as well. My PhD, as you know, is about investment appraisal in Internet banking. I am taking this stance because of my engineering background; I am fascinated by the way that technologies have shaped the banking sector, especially during the last 6 or 7 years. So, would you like to tell me a few things about yourself, your own background and the background in Egg?**
2. **PM – Of course. After graduating from Oxford, I worked for Price Waterhouse Coopers for 4 years, in the banking sector and on corporate finance transactions. Then I moved to Prudential and I worked for 2 years in Prudential, in their Corporate Finance department, and their Head Office, a department, which works a lot with all the different business units: on strategy and really the link between all the business units. And then I moved from there last summer to Egg, and I've been here a year from then. While I've been here, I've been involved in quite a few projects on setting up new ventures, more sales marketing - type of thing; so I've been linking-in with project teams and the Finance Department, the Legal Department and external clients, on the delivery of new products and new services. So, in terms of my experience of Egg, it sounds like I've only been here for a year but, as I said I was moved from Prudential for 2 years before that and I worked a lot with Egg during that time; I am very familiar with Egg from since I started with Prudential; because I had a lot of interaction with the senior management of Egg from day 1 really at Prudential, so I'd say it's more like 3 years really.**
3. **GS – Right. So what was your overall experience of –not exactly moving to Egg – but actually working for Egg in terms of being involved in an Internet-related project? What I mean is, if you compare the way you were working in a traditional FI, as opposed to a purely Internet venture, what was your experience from moving into doing things more related to the Internet and these projects?**
4. **PM – Fine. I think, if I understand the question correctly, what I would pick-up on, is the way that thing have been done and are done. And the time scales that people view in new things. I worked for Barclays – I should have mentioned as well – for 3 years, as a student for 3 summers; so I've worked in all sorts of areas in Barclays, so comparing the experience here in Egg with a lot of the high-street banks (I worked with RBS, Abbey National plus PWC) so I've seen quite a lot of players – I worked with SEB, a Swedish Bank, one of the largest Internet banks in Europe – and what I would say comparing Egg to more perhaps institutions like the more established banks, as I say, I think it's smaller, it's the Internet-related work is more about speed.....and I think that permeated through into the way that people are viewing perhaps the new projects and that sort of thing; whereas in other institutions, for Internet-related projects, you'd have a whole series of approvals, where it would take perhaps 6 months before anyone would say 'yes', in this environment there is a need for a balance between rigid control and financial discipline in all of those things. And making sure that it's not bureaucracy, and making sure that you are saying 'yes' to things you have control over after you said 'yes', rather than taking perhaps 6 months to a year to say 'yes' and then have to let it go.**

5. **GS – I see, so regarding the whole decision-making process, from my experience of speaking to the traditional banks and so on, it does take 6 months for a project to be approved, and for the whole decision to be taken. How does this, in your opinion, affect the way that decisions are made? Is it the case of a more informal and hands-on approach; is it about cutting out some intermediary stages that are considered unnecessary?**
6. PM – That's right. I think that's a good point. I think that *is* the case. In many open institutions, that's why they set-up sort of standalone ventures and this applies beyond the banking industry obviously; you would delegate the authority to a smaller business unit that would be able to make a decision more quickly. Now, in the case of Egg, and some other institutions, I think it's definitely the case of less hierarchy; and that's mainly a factor of the size of the bank. So, whereas, for example, if I compare it with Barclays – which is similar to Prudential in a way - it's a very large institution, it's got numerous business units, numerous levels of hierarchy, it's conceivable that there might be many levels of authority to go through. Of course I'm not saying anything bad about Barclays in any way, I am just talking about any organisation like that. It is that more people might be involved in the decision. In the case of Egg, the case is that it's a Plc., it's got a Board, it's therefore got quite a lot of delegated authority from Prudential; because it *is* a listed Plc. It's got all the cheques and balances resulting from that. The size of the bank means that it's a very close management team, who speak to each other a lot and who are aware of everything that's going on really. So, when they see formal project proposals, it's not something that they're not aware of, and it's something that they've been able to take a view on and think about.
7. **GS – I see. There's something you said that was very interesting. Regarding Egg's approach that you described, was it something that was taken into account when it was decided from Prudential to float Egg, and actually make it a separate company?**
8. PM – Yes it was. The rationale behind the float was very much the need to give some autonomy to the management. It had served a number of purposes, but the main ones, unlike what you might read or whatever (that it was trying to make some money and all of these sorts of things), what it *really* was about is founding a company, then giving it a platform to grow in the future; and that meant retaining the management so that the structure of the Plc with the Board meant that we would retain the management talent, and be able to remunerate them according to the success or failure of this business; whereas when it was merged-in with Prudential, that was less clear. It also allows Prudential to delegate some of the cheques and balances on what the management do, so I guess it freed up the management of Egg to do what they think is right, to a large degree. Yet, at the same time, Egg are responsible to the City; they are obviously constrained in that way, rather than a typical Head Office - Business Unit relation. So, I guess, it is letting Egg management to be a lot more accountable for their actions.
9. **GS – Right. I now just wanted to move back in the early days of Egg and generally of the Internet banking in the UK: First of all, what you've just said, was that related to the perceptions that the company (i.e. Prudential) had about what the Internet would become for banking? I mean, the fact that they kept Egg as a separate venture, did it relate to the fact that Prudential believed the Internet to become something very very big in the future, and therefore thought "We need to allocate many resources to it. So let's build a separate company"?**
10. PM – Yes and no; I think the impetus for setting up Egg was that we had already setup something called 'Prudential Banking'. And that was setup as an offshoot-banking venture to offer banking to existing Prudential customers. So, those with



pensions and mortgages with Prudential would be offered savings accounts to capture their money etc etc. So we had that in place, and this is where it started getting interesting. They then researched the market and found that a lot of customers were very unhappy with their banks, they didn't trust their banks, they wanted direct and easy control over their finances, they wanted transparent products and, following the success, in a way, of First Direct which a number of the management of Egg had worked for previously, - like for example Mike Harris, who was the first chairman of Egg was from First Direct.- they've seen that there was an opportunity to launch a new direct bank, which appealed to these customers in a sense who wanted transparent products; they wanted a bank that they could trust. So that's where it started. Then – now we get to the Internet and how does that fit to all of it – as this direct bank was being built, and the launch was all being planned, they looked at what technologies would be available for this direct bank; and obviously the telephone was the largest factor in that at the time. Telephone banking was the new thing of the early nineties, and that was seen as the core of the proposition. Internet and post and other mechanisms were also included in the proposition and were seen as important; but I think it was fair to say that the Internet was not seen to become as big a thing as quickly as actually turned out to be the case. They always had an Internet strategy and they always planned to make this direct bank have Internet capabilities, but they didn't think the UK was ready for it.

11. **GS – Going back to the early days of Egg, what was the overall perception of the organisation (and I am talking about Prudential) about what the Internet would do? For example – my favourite example is the one of the robots back in the 70's and early 80's that the robots would displace the workers and so on. In terms of such workforce issues and the general perceptions of the organisation, what was the case? Would you say that people were feeling threatened or was [Internet banking] something they quickly wanted to jump into?**
12. **PM – I think it's the latter. I joined Prudential shortly after Egg had actually launched. I guess I joined shortly after it made a huge stride towards being an Internet bank as opposed to the direct bank that I was describing earlier. I think it was definitely sense of excitement; I don't think anyone felt threatened at all; I think just in the same way that you've got telephone banks , unlike many of the other banks, where that's probably more at question, I think in the case of Egg or Prudential Banking, as it was, there wasn't really big displacement about the Internet anyway. It's not as if we had branches which might be threatened by the Internet; it was more the case where we've got call centres and communication centres focusing on telephone banking and direct post relations with customers; it's turning from that to one enabled by the Internet, which is the huge shift: instead of having people work on the telephone, you have people responding to emails and such like. So, it certainly wasn't a threat, or a fear, but there was obviously a lot of excitement for senior management; and back in Prudential, Sir Peter Davis and Jonathan Bloomer – who were the CEO and Finance Director respectively of Prudential at the time – were very excited about it; and Mike Harris and the team at Egg were obviously excited; and that permeated throughout the company I think. The IT departments were obviously very excited – I'm using the word 'excited' very much and that's what I hear from talking to other people and what I gather from my time here and in Prudential before – it's always been seen as an opportunity and nothing else.**
13. **GS – Right, I see. Now, one interesting thing you mentioned before was that people were not satisfied from their FI and so there was an opportunity back then. There was a recent brief report Datamonitor, stating one thing about switching FIs in Europe, saying that, if I remember well, in the UK there was quite a large percentage of people who wanted to change FI but couldn't**

**because they thought it was too difficult. Do you think that this is true? Do you think it is difficult to change FI?**

14. PM – Yes it is. And I'll have to expand on that. Yes, it is very difficult to change your current accounts; as some people say "they're more likely to change their wives and jobs than their current accounts", and I'm sure the statistics show this. The current account is something that no-one really enjoys – though you can say that about a lot of other financial services in a way – and, you know, a current account is a current account. That's the way that customers see it; they don't see the need to change; and they've got the relationship with their bank and the idea of trying to change their direct debits and standing orders really does make you think "Oh, why should I bother switching my accounts?". I am not particularly happy with the bank I have relationship with but it's not that bad, and it's a lot of hassle to change to something else, which might give me a better interest rate and make my life a bit easier; but will it make it that much easier? It's just that people are just not interested and willing to change. That's the first part of the answer: So yes, it is difficult to switch. However, for a number of products that's not the case. Savings accounts, which was the big thing that Egg was launched on; people are quite happy to have several savings accounts, it's easy to open savings accounts; you just put money in, you don't have all of the difficulties that I just described, thus people are quite happy to do so. And so, switching savings accounts is very easy and people do so.
15. And the second product linked to that, I guess, is the second big product that Egg was very very successful with, is the credit card of course. And people now are more attuned to having more than one credit card or switching providers of credit cards because they see how easy it is. So, I think the important thing to draw out of all of what I've just said is that there's easy products and there's difficult products. Egg for example still doesn't offer a current account, unlike many of the other banks that you'll presumably be surveying; and it would seem pretty strange to be looking at a bank that doesn't have a current account, but Egg has built all the functionality to be able to launch a current account and for a number of years we've talked about it. But I think the suggestion has been made that the UK market isn't ready for all this, and what we'd eventually do is – like a lot of other e-banks that have got into difficulty – to focus on the current account which costs a fortune to try and acquire customers on the Internet, and it's very expensive to maintain. And again, not enough people are switching, so it's not economic; it's not the best way of going about to acquiring customers.
16. **GS – One of the issues I came across by speaking to different institutions, is the real issue of making profits out of activity rates. Is this an issue that you're facing? I am not asking whether Egg has a problem with activity rates, but whether [activity rates] is something that is being taken into account. And I am actually trying to link this back to the Investment Appraisal issues. Activity rates are quite important. From what you have seen by working with Internet banks, is it a real problem for them?**
17. PM – When you are saying activity rates, what do you mean?
18. **GS – I am talking about for instance an account that someone opens, stays there, costs to the bank to maintain, but actually doesn't make any profit because it is just there (because it's very very easy to open one).**
19. PM – Right. Yes, I think it is an issue; and it's one that all FIs would monitor very closely in terms of the 'dormancy' of those accounts. And what I'm sure all FIs try and do is reactivate those accounts, try and get those customers who have a current account to use them again. And I think ...{pause}...I'm just trying to think which product to talk about; that would be normal business practice to monitor these rates, and I think, to date, Egg has been very successful regarding those; but

then of course both the main products – the credit cards and the savings accounts – have had very attractive offers.

20. **GS – A few things not about strategic issues in general: there are a few propositions that have been pronounced by both academics and people in the field about the so-called 'decomposition' of the banking model; and there are 2 of those, and I would like you to comment on those: The first one is talking about the decomposition of the banking model in terms of the Production – Distribution – Supply. What this argument contends is that you can have, for example, in terms of Internet delivery of financial products, you would have an agent like a portal selling and managing financial products that were developed and offered by a financial institution. Do you see that this is something viable? Do you see it happening in the future?**
21. PM – Well, this is a personal response rather than anything else: I don't think that anyone knows, at least in the short term. Yes, Egg have tried that as well and still do; so a good example is the Egg fund supermarket, Egg Invest, where they don't offer Egg funds exactly; they offer a range you can buy your Unit Trust from the large providers such as M&G, Threadneedle Jupiter or whoever else.
22. **GS – Isn't there one with Microsoft?**
23. PM – Yes there is one with Microsoft which is essentially the same, but when it was launched – and I'm trying to think when it was launched, it must have been late 1999 or early 2000; spring 2000 – it was the first funds supermarket, it had turned, in the UK. What a funds supermarket is, is that it allows the customer to choose from all the providers, you can choose which funds you like, and Egg in this case is enabling you to do so. That's the funds supermarket; we've also got a funds supermarket on the MSN portal as well. Essentially, it's the same thing; it's actually a different platform but the idea is actually the same. That's the case where we actually do do so. Now, we've tried a number of other services in that same way, so we did have, for a time, an insurance supermarket – and I know there's other insurance supermarkets still out there. I guess ScreenTrade, which has recently been re-launched, offers again general insurance, car insurance etc. from leader brand names in insurance; you're just using the agent to buy this insurance.
24. Now, stepping back a little bit from all those things, I think that, as you've seen in the literature, the verdict is still out as to whether these models can make money. Now, the funds supermarket one is less contentious due to the fact that they're very very popular in the US. But certainly in terms of other things, insurance supermarkets – and Egg has been also involved in a mortgage supermarket – it is difficult to know how they will evolve. I haven't been very close to this for a while, but I'm pretty sure that we've withdrawn from the insurance supermarket, and now in Egg we just offer best-of-breed products. We brand them 'Egg' but it's quite clear to the consumer that they're buying AXA products; we're negotiating with suppliers to get the best products to offer to customers. So, that was a long way round, but back to your question 'do I think it will happen', I think the trend is definitely 'yes' and I think that other people can see this distinction between the unit distributor and the manufacturer, and I think Egg is strongly placed towards the distributor in that sense, because all that it does is focused to the customer and the customer relationship and what the customer wants; the mission or the value or whatever, if you like, is not that we want to be the best producer of mortgages in the country or whatever; it's very much customer-facing; so if it were to go down that dimension, I would imagine that Egg would seem to be the customer interface.
25. There's a long way to go before that happens, because there are products that I can't see it happening easily; for example the current account: what is the purpose of the agent if people have current accounts? With a lot of the innovative things that Egg has done recently like account aggregation and email payments; those presumably start moving towards some sort of an agent in that sphere. Just to



answer your question again very briefly, I think 'open finance' is often the term used around the model that you're describing; and I think Egg is constantly reviewing what the business model would look like [in the future]; my personal opinion is that I don't think the UK is ready for it, but it's something we look out for all the time, and would be very quick to move and shift the separation – speed up in a way. I think it's very interesting in that area, the Bradford & Bingley marketplace is obviously a good example of someone who's tried to do that. I'm sure it has won a lot of praise from commentators, but again the question as I say would be whether that is a viable model to move forward; whether customers understand it at the moment or not.

26. **GS – Right, I see. The second proposition I was talking about was a proposition for similar market segmentation according to net worth of customers. We've seen a few organisations doing HNW propositions and then back-peddalling on them.**
27. PM – Well, yes Abbey National is an example; Abbey National have set up such venture in a way that it's targeted to HNW customers.
28. **GS – Yes there were also MLHSBC and Create by Lloyds, a few months back which were dissolved in any case. Why would you say these attempts were not successful? Is it a case of market maturity?**
29. PM – I don't know; I guess that those banks were aimed not necessarily at HNW individuals, in the classic private banking sense; they were rather trying to attract the mass affluent in a way; so they were trying to give private banking to the normal person who happens to have a good job and a good income. Again, I don't know and I haven't read too much on this area, but I would sense that, again, customers are seeing that they can manage their finances without paying what they might think are excessive fees for something that they don't really need; so the services that some of these people would need are good ISAs and Unit Trusts; they would need a way of buying stocks and shares, they want to be able to manage their pensions in an easy way; and maybe they're already quite able to do that, by using their stockbroker, or their online stockbroker, their investment funds supermarket, or their IFAs.
30. **GS – So they don't see any value in buying into anything like the HNW product.**
31. PM – Yes and again we've got the inertia factor regarding switching accounts and all of that; and the fact that a lot of people are not really interested in this. So, I wouldn't take too strongly a lot of what I'm saying, because those are personal views rather than any deep analysis of everything that's going on there. But obviously, a lot of these banks launched at a time when the Stock Market was plunging as well; whereas in boom time everyone wanted to buy stocks and shares and see how they can move their money around to make some more money - they always wanted to see how much they've made over the last few weeks - , in a bear market, the last thing you want to be reminded of is how much you've lost. Probably that's the one individual factor I would say that hasn't helped them at all. And I wouldn't be surprised at all if - once the economy and the Stock Markets start rising again (and it might take a number of years) - new ventures launch again. I think it will be a continuing trend; and I don't think that because those few banks have failed for the moment they won't try again.
32. **GS – OK. Now let's quickly move on to the more central issue of Investment Appraisal and decision-making. I wanted to ask you a few things on the overall valuation of an Internet project – and specifically an Internet Banking project. There is the case of CBA process approval of the project by different**



departments; you said there is a more integrated approach in place by removing the more unnecessary bits. Regarding the decision-making what is the role of the Finance function? Because there is a contention that there is always the – shall I call it – danger of the Finance function becoming a political tool for filtering out certain decisions. What is your view?

33. PM – Coming from the Finance Department, I can understand what you're saying. I think it's different here; and again it might be a factor of the size of the organisation, rather than other things. It does seem a lot less confrontational in the department here; so, for example, when we try to do a project and try to launch a new venture, I think we engage the Finance team, the Finance Departments, from the start to help us develop the business cases. So they are a support tool in that regard. They're also the control and the check on everything, which is the point you were largely making – if they say 'no' to things, then they don't happen – I think it almost has to be that the Finance case is just one of the aspects, rather than just the overriding one; I think the Finance Department would have had to have signed-off, as it were, or approve that the financial case as presented is accurate, or that there's been value produced and all of that. But I think you judge the business case on all sorts of merits. You don't just look at whether this business case delivers some ROI – and therefore say 'yes' or 'no' – but it's more complicated: What is our strategy? What are we trying to do? How does this project meet our high level strategic objectives and fit-in to the other pieces and projects that we're engaged in? What are the various scenarios? What are the downside risks? What are the upside opportunities rather of these projects?
34. And what are the operational implications? So, you can imagine a scenario where you can come-up with a business case which looks really good in terms of ROI, and would make Egg a lot of money, but on the other hand it would not fit-in with the brand, wouldn't fit-in with the strategy and it would actually not generate value in the longer term. It would be inconsistent and it would cause problems to the way that customers view us in the future. We've got to build all those factors in. I think the way it works here, as I say, is that the Finance Department are involved and obviously do have a very influential say. In the 'yes or no' decision, they're one voice amongst many, in the terms of what the opportunities are.
35. **GS – Yes, I see. Regarding the overall CBA issue, there is an issue – that I think you've touched on – the one of the identification of costs and benefits, versus the issue of valuation of costs and benefits; and these are two, or maybe seem as, two different things. From what I understand, what you're saying is that the approach of Egg is to actually seamlessly integrate them to each other, so that there is a continuous feedback in that sense.**
36. PM – Yes, I guess I was talking about pre-approval and I think that what you're trying to do when you're going through that process is trying to be as accurate as possible. You're trying to identify all of the costs and all of the benefits, then try to attach the values to them, as best as you can. As you're probably aware, it's just as much an art as a science. Because a lot of things aren't known and you have to make models based on assumptions, and obviously it's not always perfect that model. Yes, from where I stand, it's the same process, looking at identifying the costs and trying to value them.
37. **GS – Regarding the identification of costs and benefits, in your experience with Internet banking propositions in Egg or wherever, which were the most important costs or benefits that the company would take account for, and, at a second stage, were there any such aspects that were not taken account of initially but cropped-up during the implementation process?**
38. PM – OK. I'll talk about it in the higher level, because it's a broad question in the sense that it's more related to the setup of the Internet Bank as opposed to the all

of the individual projects; as I said, I wasn't around at the time of the pre-launch, but the sense I get is that there were various scenarios of how successful Egg would be in acquiring customers, that they'd be costs associated with that, so the way that Egg launched transferring its savings accounts, and going back to the customer transparency issue, for the first time going into the market and saying 'this is the interest rate, we guarantee this interest rate for X period of time, and we're not going to suddenly reduce the interest rate without telling you' such as, you know, all the other banks have different tiered accounts, if we launch a new savings account with a good rate to attract new customers while meanwhile lowering the rates once people have forgotten about it. There's standard industry practice like that, and Egg was trying to get away from that and said that 'here's one savings account, very transparent, we guarantee the interest rate'. So, looking back to responding to your question, it was known at the time, that launching a savings account with an attractive rate would generate losses. I guess, the big problem that cropped up was that Egg was incredibly successful at attracting people.

39. So the big problem now would be operational, in the sense that suddenly thousands and thousands of people are phoning-up and trying to open a savings account. So that's a case where the CBA has been done, but it has been modelled on that you're expecting a certain level of customer acquisition; [whereas you have] a much much higher level coming in. Now that obviously needs to have got the capacity to deal with demand, and Egg did extremely well and managed the PR very well, as well, and expanded very quickly and got in lots of temporary staff and all of the other things. It was quite hectic around the place, but they coped with the storm and got on with it. So, in terms of the CBA that would have come into the decision as to whether to launch this direct bank, I think they would have had a strategy and an overriding principle that 'for a new brand with a new value proposition for customers, there's room for one in the market, we think it will be successful, but to be successful, you'll have to acquire customers through some of the easier products that people will purchase – and not the difficult ones, such as the guaranteed rates for the reasons we discussed earlier – and that will come at a cost.
40. So, Peter Davis was very much a big supporter of what Egg were doing at the time, and, unlike many CEOs I think around most institutions, was willing for Egg to sustain losses of 150m GBP per year in the early years. I guess in the CBA, the benefit is that you think you are going to acquire lots of customers, and you build a successful bank; and the cost side: you know what the costs are going to be and they're going to be big. But the difference is that as there's more problems than you thought it was, the costs are going to be a lot higher than you initially imagined. But also with that comes that the potential benefit is a lot larger; because, as you know, Egg has got over 2m customers, whereas I'm sure – I imagine – the forecast statement made at the time of Egg's launch (I'm just trying to remember actually when it was published) aimed to get something like 700 or..., I think it was 1bn GBP in the first 3 years, or something like that, which we've had in 6 months. Obviously the benefit was a lot bigger than Egg thought it would have been.
41. **GS – Speaking of Investment Appraisal and the different methodologies and so on, there are lots of things, just as you said, that usually people call intangibles, that you cannot actually attach specific values on them. Things like brand value, customer value, things like the rationalisation of the systems when you apply projects like Internet Banking, issues like the possibility for error minimisation, issues like 'cannibalisation' for example, and so on, or even issues like security and how these are valued. Are these taken account of explicitly, in any way, in the Investment Appraisal process? Or are these taken account of in the strategic terms only? Saying for example 'we have to maintain a high level of security, so we're going to spend X bn on security, and we don't count how much we will gain, because we can't really say'. Is that the case with all these things?**

42. PM – Fine. Just to clarify my last comment in terms of the ....[51.26] of Egg; they are very non-specific in terms of the detailed analysis; I made it sound as if it was, you know, 'here's some money, go ahead and do it'; it is a rigorous procedure but I obviously can't talk about all the details of exactly what was done, because I wasn't involved. So, in response to your last question, when you talk about the projects that are ongoing now and the individual projects in the last year maybe, the intangibles I think, as I said, they're very difficult to pinpoint; I think it largely comes in to the models, and you might use them in two ways: Firstly, it covers the state from the strategic angle, you would not value them as such, but you would assume that 'if we did this, did project A for example, there would be a lot of potential PR around this, there's a lot of good brand coverage; and there's being indirect increase of the value of the brand – and what that means really, is that people are more inclined to buy maybe other products as well. I don't think we'd necessarily value that, although I think we try in certain cases, and I think we're doing a lot of work trying to get a lot smarter about the inter-linkages between various projects and some of those intangibles. That's the one side, and then we talk about security as well; though I think in the way that the projects are modelled, you would assume that you have to have the security; there are certain bases that, you know, are non-negotiable; you just assume that, to launch that, it has to be top-level security, and that's given; how much does this cost? So, in various levels like those, you either have it or you don't, so whatever you do, you have to have those aspects; otherwise your business may fall apart; that's what you're based on. You're based on a trusted relationship with customers and if you haven't got those attributes then you haven't got much of a brand; you haven't got anything else. So, you can put financial lines for security and all of those aspects; that's in the project course: to build security measures and all that.
43. **GS – Right. Now, going a bit into the Investment Appraisal methods themselves – the NPVs and the IRRs and all these methodologies – at the more detailed level of using these methods, is there a case for the convergence of the financial appraisal with the strategic appraisal in more integrated tools (and I'm talking about things like - I'm sure you've heard of it, I don't know whether you're using it - Real Options Valuation). Is that something that you consider a viable and valuable thing?**
44. PM – I think that the main methodology that we use, which applies to all of Prudential and not just Egg, is that the target, the Prudential Group objective for shareholder value is 4 years – I think it's 4 years. So, shareholder value is the key. So, when you drill that down to Egg, and what Egg must do, or intends to do in the next few years, it's all given around increasing shareholder value, which, I guess, can be roughly quoted to increasing the market cap of the group; increasing the share price, and all that sort of thing. So, when we look at the group as a whole, we might use more scientific work, such as the Real Options, which is what we're describing now – although I'm not particularly close to that – but if you're looking at a project, we would consider the NPVs and IRRs, the profit and ROI, we would consider all of those things, and that those have been there, but you're always looking at what this is going to do for shareholder value and trying to quote that into 'if you built this business or this project to help delivering a new business effectively, what's the value of that business to analysts?' Therefore, what's the market capitalisation of this business? Each of the projects would be trying to drive towards one of those things, trying to build into the business; OK, we want it to be a half-a-billion GBP business; is this getting there? So, it's a number of things, you know; from where I stand anyway, I don't see an overarching methodology in terms of options or this sort of thing, at the project level.
45. **GS – Right, I see. So, it's more, shall we say, widely adapted according to the conditions and the situation?**



46. PM – Yes. Well, I guess, if you're looking at the NPV, you're getting an estimate of what the value of the business is; the discounted cash flow from them, from these aspects of the business model as presented; you've got the revenues coming in and the development costs related to that, and you're looking at what this business is worth. And then, as I say, once you start aggregating some of these projects into an identifiable business, and looking at what the effect on the market capitalisation is and therefore what the effect on the share price would be, then you are sort of linking it into the whole of the shareholder value methodology.
47. **GS – May I just remind you of the time.**
48. PM – We've probably got another couple of minutes and then we'll see if there's any specific areas that we haven't touched upon, you might want to catch up another time.
49. **GS – Oh yes. That's what I wanted to ask you: whether it would be possible to have a follow-up conversation another time;**
50. PM – I could do half an hour or something like that next week if you prefer; otherwise I'm quite happy to have another chat. [TRACK 2 ENDS]
51. [TRACK 3]
52. **GS – I will send you an email to arrange if we can talk some other time. Are there any other people that you know that are involved more or less with what I'm dealing with? Any people in Egg or other colleagues that I can speak to?**
53. PM – I will probably have to think about that; I'll continue to think about that and we can catch up when we speak again. There's no one who particularly comes to mind; If you want more on the IT angle, then I can approach one of the IT people, but they're extremely busy. I haven't seen them for long. We're building a bank in France; we bought a bank [Zebank], and we're effectively trying to build Egg in France, get a grade-1 Internet bank built in France and it's taking a lot of our top IT guys. They're very busy on that but if there are specific things to discuss we can perhaps try and set something up. And then the only other angle is, there's someone in Finance, if you would like to talk to someone there. Again, I 'm not sure to what extent they would go into a lot more detail than I'll be able to, in terms of the way we're looking at Investment Appraisal. I guess I'm talking as a customer rather than the modeller like themselves, but again, as I said, that's an option that we could talk about.
54. **GS – Alright. Would you agree for me to send you an email to ask you again whether there's anyone that I can speak to? I will also send you another email a bit later to remind you about arranging for another meeting in August to catch-up with things.**
55. PM – That's fine. I guess it would be useful if you could send through the transcript; I don't need that before we speak next; it is for me to remember what we've talked about.
56. **GS – Yes, definitely. I will make sure to send it as soon as possible.**
57. PM – As I say, I know it takes a long time to transcribe all of these interviews; there's no time pressure or anything from my side, it's just useful before we speak at the end of August.
58. **GS – Absolutely. Thank you very much; you've been very very helpful; talk to you soon.**





### 3.2. Interview, 25/10/2002

1. **GS – Do you have an hour?**
2. PM – Yes that's fine.
3. **GS – I don't know how much you had the chance to look at the transcript; I was just wondering whether we could kind of continue the discussion we had started the other time. I also thought it would be best to talk to you first before I talk to TV; and by the way, thanks very much for his contact. So, let's start from things that we didn't have the chance to talk about. First let me start from a brief discussion regarding costs. You remember I asked the question regarding switching customers from one company to another, and Egg is probably one of the players that people are switching to, rather than switching from. Now, switching costs for a customer are mainly intangible. What I'd actually like to know is, do you in any way monitor something like the tolerance of cost levels from customers, if you know what I mean? What are the thresholds? Is there any benchmark?**
4. PM – OK. Just to make sure I understand this again. You're talking of switching costs for the customer or switching costs from Egg's perspective?
5. **GS – I'm talking about both; but actually, let's start from the customer.**
6. PM – Right. So, the switching costs for the customer, that we've talked about before, for a credit card, the switching costs are relatively low for the customer, because they don't have to do much, apart from applying for another credit card, and another piece of plastic arrives through the post. So, the switching costs are very low. It's easy to switch. The switching costs are obviously very high for the current account, where people have direct debits set up, they have standing orders, chequebooks, they have the whole lot. And they don't want to go and change all of these relationships; so the switching costs are very high. So, that's from the customer perspective. From the company perspective, I would say that, I guess, the main thrust of the piece is probably what I've said to you before in terms of the cost of acquisition versus the cost of retention. And it's a lot cheaper to try and keep customers, than it is to try and get new customers. And this applies across the board; not just in banking obviously; so, when people are thinking of leaving their mobile phone operators or whoever, they'll get a call to them saying 'why are you leaving? Are you sure we can't persuade you to stay?' Now, it's obviously cheaper for people to do that sort of thing. So, bringing that back into the sort of conversation that we're having, it obviously makes sense for companies like Egg to spend money trying to retain customers, and for getting the early warning signals as to whether the customers are thinking of leaving. And I'm sure we spend time on our systems to help give us that information, so that we can pre-empt some of this customer switching.
7. **GS – Right. In terms of, again, using your systems to acquire some kind of forecast on whether PM is going to leave the bank or whatever, is this something that's being quantitatively benchmarked? Or is it just some qualitative signals that you get from the customer?**
8. PM – No, I think, and I'm not that close to this, we have our Direct Marketing team; they're actually based here, and that's their job and they will be doing a lot of that stuff now. I think it would be quantitative; examples could be around... In the banking market, you would look at what's happening to balances, and if you start seeing declines in balances, for various reasons, that might suggest that they're using those products less. And therefore, that might signal to you that 'yes, this guy

is not really using his credit card', or whatever the product might be; or he's not using his savings account that much anymore. What can we do to remind him of the great value of this product? So, as I said, I'm not that directly involved in that, but I'm sure that that would be standard practice. And that's what they've been doing, and I'm sure that they have information that is helping them do that.

9. **GS – Well, that's more or less all about switching costs. We were taking last time as well, about monitoring activity rates. If you remember, I was asking about activity rates of an account and you've told me that Egg is monitoring it very closely and so on. Because I am looking into the kind of measurement things and how these can be somehow attached to future investment appraisals for other projects, do you define some kind of threshold levels regarding activity rates? What would you say are the implications on the measurement of the costs and benefits from this?**
10. PM – Fine. Good question. Along with most of the other banks, we're obviously investing in CRM systems, and I'm sure there's appraisals done in terms of the value of those systems; otherwise these companies, including Egg, wouldn't be investing in them. To what extent we have thresholds of what we can get out of them, I really would find it difficult to answer. I would imagine for that system, they would look at the system and what it would do, and they would look at what benefits it's going to bring, and assume that this will help them retain X customers, will help them cross-sell this many products; so that information has a value. So, they might look at it in that sort of way and say, 'yes actually, this is a valuable thing'. But I'm not close enough to it to really answer whether there are strict benchmarks that we've got in these thresholds and whether those indeed are strictly monitored after the event. I don't know. I can ask a few questions and get back to you on that; I'll see what I can find out.
11. **GS – That would be really useful. All this discussion about the intangibles and the value of using CRM systems and so on, all these things relate somehow to Knowledge Management (KM). In that sense, I do realise – and correct me if I'm wrong – that an operation like Egg, whose main channel is the Internet, this is what signifies the core value; its knowledge assets if you like. So, linking back to things like the financial reporting system and the fact that the companies try to maximise shareholder value and the means for doing that, relate to financial reporting and so on. How are you tackling with that? I mean, passing all that information about the value of knowledge to the market, so that it is well taken as a signal and reward your shareholders.**
12. PM – Fine. I think generally, and we can step back down to KM, but there's a rule, I think, for a lot of these intangible assets – as we touched on before but we didn't go to any detail. From an accounting standpoint, and from where we're reporting to the market, we'd be very very prudent. I don't think we'd be assigning any value to a lot of these things. And that's largely a factor of accounting standards and the financial reporting rules; so, around intangible assets, there's lots of constraints on what you can and cannot do. That doesn't mean to say that you can't report things, which, in addition to accounts, people take notice of, as notes. Egg doesn't do this, but I've seen companies where they give additional information and, I guess, a good example of some of that would be life assurance companies, who prepare their accounts on the accounting rules, and then produce them on something called 'Achieved Profits Basis', which isn't the accounting rules or some industry standard, but it happens to be what the market uses, what the market likes, and it's a better reflection of the profits. So, they provide that information as well.
13. So, in the same way, with intangible assets, you *could* produce their accounts according to the rules, and then say, 'actually, for this KM, we think this is the value, and this is why it's there and/or our brand value is such, and these are the intangible values, and we could report them'. So, despite the accounting rules,

companies could talk about them. Now, back to Egg, and what Egg does: it reports very much in terms of the accounting standards and the accounting rules. So, the only value that it would be getting for intangible assets would be anything that was spent or purchased. So, in terms of development costs, if you built and spent millions on an IT system that you're using for several years, that's an intangible value, or intangible asset. In a way, parts of that development has been intangible, but you're treating it as part of developing a system which you're going to benefit from over a number of years. But that's far more tangible than some of the things that we're talking about. In terms of KM, I don't think – well, I'm pretty sure – we don't ascribe value to this; it would be very much more like, you know, we've built the CRM system and it's a development cost, and we're going to benefit from it for a few years, but we'll spread that cost over the time that we're going to benefit from it.

14. **GS – In the balance sheet, is this R&D spending or Development Costs?**
15. PM – Good question; I would have thought it's probably development; in terms of R&D, in terms of the research stuff that we've taken, that would be just straight cost. But in terms of development, depending on what it related to, a big investment project, several million pounds into IT systems that delivered something specific, that may well be called 'Development', and that would go through that line. So, it's taken it a long way, though, from the intangible nature of it and you seemed to be – correct me if I'm wrong – eluding to the... rather than the cost, you were talking about 'let's value some of the benefits of this CRM system and let's get...'
16. **GS – Well, actually, it's more about both. Benefits are something to value more apparently, because you don't have them anywhere. The costs, if you have development costs for a CRM system, there is money pulled in – and there may be intangible costs as well, in the sense that there may be issues that cause indirect tangible costs which are not exactly attributable to a specific source. So, the answer to your question is that I'm talking about a bit of both.**
17. PM – Yes, I understand that. I guess I'm trying to make a black and white distinction and then saying that 'no, it's largely based on the cost side' and that the benefits side of this stuff would come through in terms of higher sales numbers, in terms of additional profit, and again it's tangible things like that. Now, do you make the direct link between the two? No. So, I think that's where it will for reporting. So, that's the Knowledge Management side; but also you could apply that same logic to other things such as the value of the Egg brand. And you might say that – and this would apply again to any well-known company – the brand has a value, and its intangible nature in selling more products is key, especially in financial services. So, do you ascribe of a brand value, which reflects that the sales and additional profits you get? Possibly you could do, and then: Will our people value the brand in terms of the accounts? Again, no, we don't do any of that sort of work.
18. **GS – Have you heard of what is called Knowledge Accounting?**
19. PM – Maybe I came across it with a different guise; do you mind explaining what you mean?
20. **GS – Well, there's not very much detail I can talk about; it's something that appears in some of the literature, and it's something that Scandia Bank – which is notorious for its work on knowledge assets – invented. It's, in a sense, some way of attributing more tangible costs and benefits to knowledge assets. I wouldn't like to talk about the detail of the method and the practice itself, but rather my question is: there are some kind of standards appearing to develop, that at least are partially used; just as you**



said, a company may want to disclose additional information, and that may be one tool for doing that, Knowledge Accounting. You know, something like a knowledge balance sheet or something like that. Do you see that's something going forward in the future, in terms of the reporting mechanism?

21. PM – I wouldn't be surprised in the sense that accounting seems to be going that way. Other examples would be a lot of the green reporting. Shell, in addition to their annual report accounts, they do their green report, which is very detailed and audited and you see detailed information and all this ethical accounting and environmental accounting coming in. From what I pick up, this Knowledge Accounting is something like trying to ascribe values for some of this; and sticking to those rules in reporting them over time. So, I don't find any of that surprising, in the sense that companies generally seem to be disclosing more and more, and to be under pressure to do so as well. Do I think that it's going to become mainstream in the short term? Probably not. And that might well vary on the maturity of the company and all of these sorts of things. I don't see it as being sort of priority for Egg, and probably for many other companies in the short term; but, as you know with these things, as soon as they become in vogue and they become the standard, and everyone is reporting on them, everyone quickly follows the bandwagon and then, maybe a few years later, it goes out of favour and quietly, these ways of reporting are dropped. So, it may become a fashion that the people follow, but, you know, the fact that I'm not fully aware of what this practice is – although I'm not in the financial reporting area – if it was becoming more mainstream, I would hope I'd be a bit more informed about it.
22. **GS – Right. A part of it is a kind of straightforward accounting; the benefits associated to employees, and the training costs and things like that, which are more straightforward. Again, this is not something that is digging into the very essence of KM. Still people are trying to find out how they can attach value on these things. As we've started this conversation about accounting and the standards, would you say that if the accounting standards were a bit more relaxed, in the sense of what you can and what you cannot report in terms of intangibles, that it would be valuable for Egg to do so, should there be a proper way to do that?**
23. PM – Two points really: Firstly, I don't think that the accounting standards will become more relaxed. Everything that has happened in the last 10 years in terms of accounting standards is to become tighter and tighter, in terms of what these standards mean. And the previous regimes have always been very open to interpretation. That's still the case now, but they've become a lot tighter. And, in the past, it was up to managers how they interpreted the standards and what they thought the provision was, and how much that provision should be, whereas now, all of the standards have become far more specific, in terms of 'this is the only sorts of provisions that you can do', 'this is what you have to have, to have that provision', and 'you must meet these criteria'. So it's becoming much clearer. And this links-in with a lot of the US accounting as well, where it's very strict. So, firstly, I don't think that there would be a relaxation in terms of what you do with intangible assets. There is the other trend, though, that we touched upon as well, which is the growth of additional disclosure. There would be the feeling that maybe you're following these strict rules, so that we're keeping management discretion to a minimum, - and especially in the light of all of the scandals last year. Against this, I would imagine that they'd become tighter still. But analysts and people watching the company might say: 'Well, actually, that's fine. They're reporting on this, but it doesn't really tell me what's going on in the company.'
24. Because they treated all of these things in a way that the accounting standard says, but actually you should be treating them this way or that way. This development that they have done, they had to write it all off to the PLA for that year, because the accounting standards say they are, whereas surely there's some

value in that, that they're going to use in 5 years or so'. And so you might get adjusted accounts. That's what the analysts might well do in such a case. So, you see that trend, I would have thought; I'd see a trend towards additional disclosure to make these accounts more meaningful and give an alternative presentation of the accounts, and more unofficial. Whether there's value on Egg doing it, was your second question. Possibly; I would think probably not much at this stage, because, I think, there will be a lot of scepticism regarding what you're doing and whether you're trying to mislead investors. But again, there may be a swell towards what I was saying there; a push towards additional disclosure on this; and analysts actually pushing for this, in which case it would obviously be beneficial to Egg.

25. **GS – I see. In terms of this additional disclosure having as well a comparative role – and this is what standards are for, comparison: If there was something similar with the reporting of knowledge assets, would you say that this could cause some kind of imbalance between different sectors etc?**
26. PM – I wouldn't have thought. I would have thought that the way that these things evolve, that the companies would chose their own way of doing them, and then industry bodies etc. and accounting standards people would come in and help. Trying to form uniform standards to help the comparison. But again, I'll go back to, maybe, environmental accounting and things like that, which are a lot more developed, and still, I think, companies are interpreting what they think is important to large extents. I think it would take time to come to agreed standards on what knowledge accounting is and how it should be treated. And certainly I wouldn't say that this would happen in 1 or 2 years; that wouldn't happen; I would see it evolving over time, as people get clearer to what this information means and all of that sort of thing.
27. **GS – Alright. Enough about knowledge accounting {laugh}. I want to go back to the previous discussion that we had, when I asked you about the case of launching Egg and the additional costs on doing the launch, which were on the operational side, in the sense that there appeared to be a lot larger volume than anticipated. First of all, I don't know how much you know about what happened then, but I'd like to ask you how was this dealt with? I mean additional volumes.**
28. PM – Fine. I should re-iterate that I wasn't there at the time, and I've asked this question myself a number of times, and the answer I've got is that they coped with it remarkably well. It was the case that everyone and anyone was helping man the phones. So, you had people whose job it wasn't, who were quickly trained and moved up, so you had additional capacity from that. They probably recruited quite quickly. Now, all of these things have delay times but the key thing, I think, is that they outsourced a lot of the calls; and I can't remember whether it was to Ireland; that rings a bell, but they outsourced a lot of the handling of the calls to somewhere else as well. So, as you'd imagine, they had their operational plan at this level, when actually it came in so much higher than they actually expected. Their contingency plans were probably stretched to the limit, and then some more. But, I think, it was a combination of those factors; everyone getting involved, plus additional recruitment, plus getting the capacity that way, and then the quick way of doing it was also getting outside help. So, outsourcing it to companies who have lots of people there available to answer the phone, to quickly train those, and suddenly you have a lot more capacity. It was very difficult, I think, over that time; there was a lot of negative press comment at the time. The fact that the calls weren't being answered and that sort of thing, as you can imagine, media stories always – as I said before – are either incredibly positive or incredibly negative. If they're in between, they're no new story.

29. **GS – In terms of systems capacity, were there any problems there? How were these dealt with?**
30. PM – I'm sure there were. Largely at the time, there was a lot of telephone request at the time as well. They hadn't sort of switched over completely to being an Internet bank. As I said to you before, when they launched, they wanted to be a direct bank, and they knew that the Internet was going to be a big part of it, and they had that capability. And then, a few months before launch, 6 months before launch, they realised that the country was ready for the Internet to play a bigger role. But at launch, the telephone was still the key. Again I asked this question a long time ago; the fact that they built scalable platforms, in terms of that you could bolt lots on, and build off those (and they were a very flexible architecture) had meant that they could very quickly expand and move quickly. So, you can imagine lots and lots of resources probably went into those systems at that time, to deal with this capacity. Was it without problems? I doubt it. You can't suddenly scale-up like that without problems; but the fact that they have built them on a sort of framework, they didn't have any historical systems that they had to worry about. They had started with relatively new systems and they'd obviously build onto that state-of-the-art stuff. That meant that they could expand without having to worry about a lot of these meshy integration issues, which - from what I understand - are the nightmare of IT projects: dealing with all the old stuff. So, I think that played a big part.
31. **GS – After all this was actually managed with, you know, the call volumes and everything, and operations continued, was there some kind of post-implementation review or appraisal?**
32. PM – I imagine so, but again, I can't really say. I imagine there was, simply because we would be doing the same thing a number of times in the future. And it would be strange not to learn from your mistakes. Now, how formal or informal that was, certainly, there would have been all sorts of learning from it all; to what extent you formally documented exactly what to do next time, I would have thought that would have been incorporated in the plan for the next releases. Just before I answer that bit, the other way of controlling some of this capacity was to reduce demand in some ways. So, I think I probably mentioned before that they launched, I think, at the end of September, early October 1998, and by 1<sup>st</sup> of April, I think, they switched to that you could only apply for an account on the Internet. Now, obviously that has capacity implications for the phone in the positive sense, and it probably has a negative one in terms of your systems' capability. But presumably, you've thrown a lot of money at it. And that was the other factor. They had the full support of Prudential and a lot of money to develop these systems. So, you can imagine if you had done it in a small way, it would have killed the bank, wouldn't it? But they had the money. OK.
33. Again back to where I was going. The next wave was the Egg Card launch, and again, you would have taken all of the learning from the savings account launch in that this could be big, this could be small, let's see how it goes; and I believe that they had capacity problems again, albeit so much smaller. So, again it was a victim of its own success. But it proved a very popular offering and it has been marketed incredibly well. And so, though we had very positive expectations of demand, it exceeded those again. So, I think in terms of that role in learning, there's both the formal aspects and the informal; the informal in the sense that it's the same people being involved throughout the times: the same managers, the same product guys, the same operational heads, moving on the experience. You know, once one of these guys remembers the time he was having to man the phones, it's only 6 months later or a year later that you had the credit card. You don't forget that quickly and you would have that in terms of the formal sense, you would be a lot clearer about your formal plans and contingency plans, I'm sure they're very ready for that. Where it gets a bit more interesting, is that we should be launching in



France in the next month, which is another example of exactly what we're talking about.

34. You've launched the savings account, you've launched the credit card, there's other launches; and now we're launching the Egg brand in France in a big way. So, sometime in the next month or so, Egg will launch in France. How many credit cards, savings accounts, current accounts or whatever their products are in France, do you think they're going to sell? You don't know whether it's going to be a huge hit, a flop, or, you know, so good that everyone in France wants to get an account. So, I'm sure again, all of the learning and the experience that we've got from the UK in doing these launches, and what *could* go wrong, I'm sure it's {taken into account}. A lot of the people from the UK have been working over in France for the last 6 months, both on the IT side and the operations side. So, all of that knowledge is passed over informally and – I'm sure – formally, in terms of that the lessons from the past have been incorporated. So, we'll see how it goes.
35. **GS – Yes, I understand what you're saying. In a sense, you never know how the venture will develop under new conditions. Regarding again attaching values to intangibles, do you think that this is something that simply cannot be done – and I guess I'm asking your personal view – or if it can be done, it can be done in a very patchy way? Or is it something that is not worthwhile for the organisation to do in terms of the cost of acquiring all that information and putting them into structures that can be translatable to tangible values; and so on is not worth the investment? And that actually links to research that companies are doing into using tools for appraisal; using new tools, or developing their own appraisal tools and so on. In general, moving forward in being more efficient in appraising their investments, and specifically the IT ones.**
36. PM – Understood. Is it worth taking account of these intangibles? I think it is. So, to ignore all the intangible benefits and potential, and intangible costs, I think is misleading. Whether you can systematically ascribe values for it, which produce the right decisions is debatable – in my view anyway. You *could* develop systematic ways of going about things, so that you can compare like with like and so that you can ascribe real or straightforward values to these intangible assets; but I'm just wondering what the sort of costs-benefits would be if implementing the appraisal system. Now, in the absence of this system, you could have some very basic way of judging the value, and that might give you an error of plus or minus 30%; but it's very easy, and you just do a few calculations and there it is. So, you've got your business decision based on tangible values and some guide as to your intangibles. Alternatively, you could spend millions on a system which goes down to fine detail of exactly how the intangible is made up and what it is resulting to, and how that will relate to cross-sales, customer retention, or whatever it is we're building in there. I guess, there would be value in that system for sure in that it helps decision-making and that it is a good guide.
37. What I'm questioning – I guess – is twofold: One, I'm questioning whether whatever you came up with would be a truly unbiased and objective way. You know, you could come-up with systematic rules and that would help decision-making in that everyone would understand the rules and understand what's coming out and that it's on an objective basis. However, whether that would give the right picture every time is debatable. And, I guess, the second point is the cost aspect, and if this system would cost 3m GBP, I sit here and I think "I can spend 3m GBP on this appraisal system which will help me appraise investments on IT projects, or I could spend 3m GBP developing an IT project and delivering something, which I'm pretty sure it has some value. Still a bit unsure about exactly the intangible elements of it etc..."
38. **GS – The opportunity cost is quite high in developing a very expensive system for appraisal...**



39. PM – Yes, I guess there's a trade-off and it depends on what that cost would be, but the cost shouldn't be ignored. And there's a general tendency, I think, – certainly in Egg, but I would imagine across all organisations – that they loathe investing in systems that don't deliver any clear value. So, I would have thought Management Information Systems, people are happy to invest in them, because they can see some results coming out of them; that there's some value in the additional management reporting. That helps decision-making, which helps in that they could report to the market how they make better decisions etc. But there's always a fine line; the people doing the management reporting, or the people closest to it, would want to find *this* out, would want to have report on *this*, would want to have a report on *that*; and there's obviously opportunity cost, you know. At the end of the day, would it really change the decision if you knew all of these things? And i.e. better off investing your money in something that produces revenue, than {something that} produces a few extra reports, which I believe isn't value added. So, I think that's maybe where this would lie if it could be proved that investing into this system *would* improve decision-making and would avoid errors of the past, then you would have a business case to present the system for its development. But I'm just wondering whether you would really be able to come up with that case.
40. GS – Yes, I see what you mean. Actually my question is twofold: The one is, as you just answered about spending all that money into developing a system that can produce all that; and the other is whether you do some research that is unrelated to whether you're going to use a complicated MIS for it; you do some research to see for example that using something else (and I will come to that a bit later) rather than the traditional NPV, IRR financial methods may be delivering some goods. And obviously this is something not that costly as spending so much money in an information system. It has more to do with what I would call tradition {laugh}, or established techniques. So, is there research to this end? To finding whether you could use alternative or complementary financial or other appraisal tools? And do you look into that?
41. PM – I would say that, yes, there is value in looking at different appraisal techniques and that does give you a different picture, and just focusing on one measure can be misleading. Whether we look into it in great detail, I doubt. I think – and this maybe leads into the next area of your questions – shareholder value is the way we look at things, generally; and I've said before about the NPV and value numbers being quite important. To what extent do we look at using other ways of looking at investments, such as the Real Options that you mentioned, we're not using those things as far as I'm aware. I've not come across them; I don't think we're using them in the Finance department. In terms of the IT community, anything that feeds through from there, I haven't come across it. But if it's up at a higher level, then maybe it's going on; but I very much doubt it. It's more all about shareholder value, the cash effects of the projects; whether they make sense. And then, in addition to that, you would try and assess the shareholder value of some of these intangibles. So, projects that don't turn up a positive NPV on the tangible basis could still go ahead for all the intangible reasons. Now, whether you've used a sophisticated system that gives you confidence about the intangibles, or whether you've just done a broad-brush look in some of the intangibles and what the possible value in them is, I think it might lead you to a similar decision. There's also with some of the intangibles, the question of double counting. And I think this is where we started the conversation, in a way, where I was talking about the value of the CRM system and that this is coming through maybe in sales and profit. Well, if you've got projections of what your sales and profits are and then you're adding the fact that you're going to get this value from this system of CRM, then you've just the danger of adding both together. So, you've just got to beware with some of

those things; I'm not saying you can't get round that but just highlighting that point. So...I'm just trying to think of some of the other methods that you mentioned. There was Real Options...

42. **GS – I didn't refer to specific methods, but there are a number of such methods...I think I have the list with me...which are not specifically financial ones {GS shows the table with the methods}. I don't know whether you came across any of these names; getting into too much detail wouldn't be very useful.**
43. PM – Yes. Interesting. It's a whole fascinating area the way that you can value IT projects. It's a very difficult one. And the fact that there are so many methods out there, obviously suggests that there is no one method that is infallible; and still the subjective and unknown elements of all these projects do make it very very difficult. I probably mentioned this to you the last time; the general view across management communities and organisations is that IT projects, the one thing you know about them is that costs are understated and that the delivery date is optimistic. And there is definitely a feeling of lack of control of how some of these projects work. But everything we do here is very much business-led in the sense that you're looking at the business benefit of all of these projects and that's what the decision is made on. And then, the IT community are working with management and the business people to see what IT you need to deliver results; and whether the business case makes sense, which then comes back to shareholder value where you're looking at things in the sense that you're not trying to divorce the IT costs from the business return. So, "it's going to cost a few million to build this system; this is the customer proposition; do you believe the customer proposition? What revenue are you going to get from that?" But everything starts from the customer and works its way down to the IT level.
44. **GS – Right. Another thing I didn't have the chance to talk about last time (well, we barely touched on it) was power relations regarding an Internet project. And I remember we were talking about the Finance people getting involved from the very beginning of the project, so you have some kind of all-the-way accountability and all-the-way knowledge of the different steps and so on. And make sure that nothing becomes an impediment as opposed to an aid to the project moving forward. In projects such as launching an Internet bank, an IT-related project, what would you say is the kind of relation that develops between the different sets of experts? You know, Finance experts, IT experts, Banking and Marketing experts – as all these four components are apparently the main ones. I don't know if I'm missing anything out.**
45. PM – No, it's a very good question. And I mentioned last time, I'm sure, something about the size of Egg compared with other banks as well. And that does have a huge bearing on that relationship; and you've seen here the informal nature of the layout; we have everyone crammed in, sitting on each other's laps {laugh} and all the departments are next to each other. And this is a very poor imitation of our Darby office, which is a large football stadium sized environment like that. It's next to Darby's Football Club actually {laugh}. Those elements are actually quite important in terms of the culture; and the fact that, in many organisations (and I've worked in many organisations like this) there's very much a silo mentality; so you have a Finance department, you have an IT department, and each of these departments will report up and they come together at the top. Egg is deliberately being based on a matrix structure. So, yes, it has those silos – and that's the way everyone is reporting up through them - but actually, informally, there's so many dotted lines and cross-functional teams, and that's the way things get done. That actually they become more important than the silos...

46. **GS – It's a type of 'social association' thing.**
47. PM – Yes, and rather than formal procedures (and I'm not saying that formal procedure is not important) there's a lot more relationship and networking and discussion to get people's views on things here, than maybe other organisations, which have more formal procedures, and more mature organisations; larger organisations. I'm not suggesting that one is better than the other; I'm just suggesting that that's something that is particular to Egg and similar organisations. So, where the power lies actually varies. Because I would say that the strongest community, probably, are the people involved in the proposition; in arguing a case for a customer proposition. What I mean by that is that if you're planning to do something, if you can make a case that the customer will love, it will generate value; then, everything else follows. So, in this power relationship, you would often get people who are involved with the project, are passionate about the project, influencing others and winning their support; rather than, maybe, strict departments looking at it in different ways. So, the fact that the Finance community are being involved and are saying "if you believe this, that or the other, then this is what it looks like in financial terms" and question you on that, I wouldn't say so much power lies in that, compared with other organisations, where it's a far more strong a check. If you've got ticks in the boxes for the proposition, and then you think that customers will buy this and Egg will benefit from it, if that story is compelling, I think, the rest follows. So, the groups that you mentioned were Finance, IT, Banking and maybe Marketing.
48. I think what I'm saying there is maybe the Marketing area – although it's all a bit mixed-up in terms of Marketing and Operations; there's quite a lot of overlap in a way. It's hard to explain, but essentially we're saying it's senior managers in the organisation who sort of move across from areas, but are responsible for delivering something that is customer-facing. IT, I would say, are less influential at that stage, because the important thing is whether {the product} is bought or not. But often, the IT element of it is quite key. And there would be quite heavy reliance, I guess, on what the IT community are telling you. Similarly, with the Finance community, there's reliance on what the Finance community are telling you, but at the end of the day, it comes down to whether you believe the story. And all the Finance department, and maybe the IT department are saying is "if you believe these assumptions, or you believe this story, then this is what we need to do in the IT area, and we can do it; and in the Finance area, this is what it would look like, and this is how it would be funded, and that would be the case". So, more influence, I'd say would be in the Marketing area, which seems surprising in some ways for other organisations that I've worked for, I would have thought.
49. **GS – Right. You said that in other organisations it's more likely that you get this silo type of expertise, being clearly divided rather than based on this type of associations that you have just described. Apart from that – which actually makes perfect sense – do you see any other kind of expertise arising from this Internet banking kind of operations? I guess Egg is the best place to ask this question. For example, if you have combinatory Marketing and Finance skills (and I'm just picking 2 out of the 4 mentioned expertise types by chance), then you might be a new type of power or whatever combination of skills and background.**
50. PM – I think, it's maybe a reflection again on the size and stage of growth of the company as well; but there's been a lot more fluidity in terms of what people do. So, people with Finance background are working on Marketing propositions, people who have background in Operations may be similarly working in Marketing, and it can work both ways. When I look at a lot of the managers, there does seem to be a lot of movement in terms of what they do, and sometimes even the job descriptions don't really mean very much, in the sense that you get involved into what you want to get involved in, and the fact that your label is Marketing or



Operations has less bearing on what you've actually said 'this is what I'm doing', and getting on with it. So, what struck me here is the fact that rather than, again, these silos, there's so much blurring that, as I said, people in Operations will be coming up with customer propositions, rather than a Marketing department sitting on its own, coming up with the strategy; strategy seems to be everywhere at the moment. Now, whether that is going to be the case in Egg in a year's time or two years' time, I don't know; and you're going through the growth stage of the company; it's a young company, and you would expect that in the early stages of this, you would want generalist managers who can do lots of different things in a more entrepreneurial type of way.

51. As you become a more stable organisation and the growth is tailed-off and it's now more about efficient operations, then I would expect a move towards silos and specialists coming in, who could 'run this marketing function like this'. I'm not saying that we haven't got specialists, because we do. But what we would say again is business as usual; trying to make sure that the operations are great, making sure that the direct marketing is working effectively, all of that is business as usual. At this strategy level, rather than in some organisations where you've got a strategy department who come up with the strategy and write the papers on the strategy and then that is sort of rolled out, and 'this is how it affects operations or whatever'. It's more like each department seems to be working on strategy all the time. So, you could argue one of the cases is more entrepreneurial and will come up with better results, or you could say it has little implication of costs. And it depends on what stage the company is at, as to where the balance lies, I think.
52. **GS – Right. Just one final question. I'm aware of the time.**
53. PM – Just a final on that one, to give example of some managers who have been moved around from working in strategy areas – so we have a small Strategy team – from being Head of that, to being head of the Sales business, to being Head of the Reporting business, to now being Head of Investment business, which is operational. So, this is a good example of someone who was a generalist, working around Strategy, Marketing, Sales, and Operations.
54. **GS - Right. My last area of questions, if you like: Would you say that there is an implication of using the Internet channel in affecting financial engineering itself? I mean that in 2 dimensions: The one is in giving rise to new products; the second one is in giving rise to a new type of financial engineering, if you see my point.**
55. PM - I don't understand your second point. I understand your first point.
56. **GS – Actually, my second point is in relation to changing the way that financial engineering is made; not in terms of using the technology – that being the catalyst – but in terms of adding new dimensions to financial engineering if you like.**
57. PM – I'm just trying to understand what your definition of financial engineering is.
58. **GS – Well, in a word, designing financial products. I don't know if I'm falling short of the definition.**
59. PM – No, you can interpret these things in many ways, so I was trying to make out what you mean. So, I'm interpreting it as whether the fact that there's a bank on the Internet and whether Internet banking as a whole gives rise to 1) completely new products that haven't been done before and 2) whether, even with existing products, it changes the nature of those products in a significant way. {I think it's} Both. I think it's a huge point really. Let's talk about existing products first. On credit cards, it changes completely the cost base. It changes the customer proposition. In



terms of the customer proposition, it means that customers apply online rather than waiting for forms to come back and forth (although some of it is money laundering regulations). It means that you can see your statements and balances any time of the day; So, from a customer proposition point, it's offering things that didn't exist before Internet banking. So, it's a whole new way of interacting with the financial services provider and getting better information on your product. And then from the bank's point of view, it has revolutionised the way that these products are offered. So we come back to cost. So, the fact that you're not sending out paper statements, the fact that your systems are doing the sort of credit checking online, rather than you waiting for someone to enter the details from the paper that they received, and then go through the credit scoring; all of that is done either over the phone, or online.

60. That does mean that you've got a lot of cost savings. So, I guess that what Internet banking has done is that it allowed you to streamline the process. Some will argue that you make the customers work more, but you're able to pass-on these benefits. And then again, as I say, it has got various customer benefits; such as a lot of people do Internet banking, I can't imagine how they would do it without Internet banking anymore. So, I think that's a huge point. And it varies from product to product. But I think for current accounts it's a big thing. A lot of people are very familiar now with seeing their balances online, being able to transfer money from one account to another just by clicking a few buttons. So, I think it has completely changed the way and the options that you have there. Within any product, you could imagine that every business is thinking, "right; how can we do this better and how can we do this more? So, how can we improve the customer information and the benefits that they're getting by doing it through this channel? And similarly, can we streamline the process even better, which enhances the customer experience and saves costs as well?" So, that's a big point and in terms of new products that people have not really thought of, again, I think that is a big point and Egg has tried a lot with lots of different things. I guess most recently – I'll step a few years back first of all about the fund supermarket that we discussed last time – but the whole idea of that was that most people buy their ISAs or their investments by visiting an IFA or they go to a bank, or they're posting things to the post or whatever, which is quite a cumbersome process.
61. If you streamline that and give them something so that in a few clicks you buy your investment and you can see how it's valued online, rather than every 6 months receiving a statement through the post; that's an example of a customer proposition that's new; and from the business side it's a new opportunity. And then, more recently, I guess, if you read the FT yesterday – I don't know if I mentioned Account Aggregation, which is essentially the fact that if you have a few bank accounts (you may have one with Barclays, one with Egg and one with First Direct), if you can just log on Egg you can see all of your accounts through that login.
62. **GS – I read actually in a Datamonitor report about the Citibank's Account Aggregation, which was a huge success with 20K people signing-in.**
63. PM – Right. It's interesting, every report I read about Citibank, I get different numbers. Some say it's as low as 5K. So, I'm not so sure, and Egg, the numbers that were reported yesterday were talking about 100K customers. So, that's another example of a proposition that didn't really exist before. And the challenge for all of these new propositions, more so than existing products, is what do we do with these? What is the value proposition? Do customers value them? Are they products in their own right or not? And all of these sorts of questions. Again, earlier in the year, Egg launched e-mail payments, so, rather than knowing the banking details of someone you send them an e-mail and they fill it in and send it back and the payment goes. So, again, it's opening-up new opportunities, and Egg is very much trying to be at the forefront of all of these sorts of things. And, as I say, you would build business cases and this links back to our whole conversation really.

You would build business cases and all of these, even with a lot of intangibles around them, and it is still quite difficult to work out exactly how things will work out. But there are still opportunities and there will be far more opportunities as well on what you can do online. And, as you said, you look at Datamonitor and you read Forester Research or any of these, they're always talking about the pros and cons of all these, Account Aggregation, or Online Advice or whatever it is; there are opportunities there which are unproven, but how have people in the pros come, how have people in the cons come. It's just fascinating; there are opportunities out there that can work. It makes it a bit more interesting.

64. **GS – I guess that's everything I wanted to talk about. One thing that I usually ask people to tell me is do you think that there's an area (we already had 2 one-hour discussions) that I'm not looking at, and I should look at, from what you know?**
65. PM – Fine. That's a good question. It's always difficult when you're asking these questions whether you get the answers that you ask. No, I think you're covering quite a broad range. There's nothing that immediately springs to mind, but I will have a think and I will try to find a bit more about CRM information. I won't be able to give you any detail, as you can imagine, in terms of the specifics, but in terms of the level of discussion that we're having, I can give you an indication of how we might have looked at the CRM project and how the pros and cons were broadly thought about. But I think some of the areas you've been probing in terms of the detail of these sorts of things – the investment appraisals methods – I've been kind of narrowing my answers in the fact that shareholder value keeps popping-in and back up. So, I don't think there's any stones unturned or things that we haven't covered. As I said, I'll see what I can find out and I'll be in touch in due course.
66. **GS – Is there any type of documentation that you're allowed to share with me?**
67. PM – I had a thought about that and there was nothing that sprang to mind; you know, procedures manual or anything like that, telling you how we do these things.
68. **GS – Yes, templates or whatever that you may use and which are not confidential or whatever.**
69. PM – There was nothing that immediately sprang to mind. There's not templates as such. The only sort of template I can think of is the way that we go about looking into new propositions for customers; thinking at that sort of stage, but that's not really looking at the investment appraisal methods. Anything else is just specific models on specific opportunities, and although they follow a formal trend, I don't think there would be much value in passing that on, but you can imagine that they're largely NPV type models where we look at the opportunities.
70. **GS – I could be useful in a sense if you could provide this.**
71. PM – Yes, again there's the confidentiality point of some of these models as well; but obviously if I can take the numbers out, then...
72. **GS – I'm not interested in the numbers.**
73. PM – Yes I appreciate that. I'll have a think and see what we've got there, because I wouldn't have thought there's anything commercially sensitive on some of that. I'll see what I can find. Some of the ones I might have in mind are just very straightforward DCF calculations and how value pops out, so I don't think there's anything particularly revolutionary about them.

74. **GS – Right. Thanks very much for that. Sorry for taking so much of your time.**

### 3.3. Telephone Interview, 17/03/2003

1. **GS – I don't know how much you've read from the document that I've sent you about what I am researching.**
2. **TV – I've read it, so it's fine.**
3. **GS – Right, so the way I'd like to run it is to give you a bit of information about my background so that you know where I come from, then I'd like to kick off the discussion which is mainly about issues of decision-making and project prioritisation from the Finance point of view; things about identifying mainly the intangible and mostly the IT-specific issues; issues relating to investment appraisal practices – which is one of the main areas that I am investigating in UK financial institutions, and a few things about methodologies on taking account of things like knowledge assets etc. So, just a bit about my background; I am originally an Electronic Engineer and I've worked in Greece in telecoms for a couple of years. Then I've taken the MBA in Edinburgh University. I am currently doing this PhD and I am a Research Associate there as well. So, that's me in a nutshell. Would you like to tell me a few things about your own background and where you come from?**
4. **TV – Sure. I've been with Pru Bank as it was in Egg's launch; before that I was in Prudential Group strategy and before I was with another part of Prudential doing marketing, actuarial technical roles. While I've been at Egg and Pru Bank, I've been involved in customer and product value calculations and assessments, and lastly – which is probably most relevant to you – I had a role, which was effectively on major projects financial evaluations; so, any new initiatives like entry to France, buying subsidiary companies, taking investments, launching major new projects, major new products, would be assessed by my team. I've now moved away from that role but within the last six months that was my main experience with Egg.**
5. **GS – What I would like to do is start more or less by talking about the decision-making dynamics throughout the whole process and the role of Finance in decision taking. There is a contention – and it has been usually the traditional take – that the Finance function is seen as a bottleneck, if you like, versus a facilitation function, especially in an organisation where you have a 'silo' approach. What is your experience from working in Egg and in different organisations, as regards this role of Finance in decision-making?**
6. **TV – It's quite interesting, my experience, as I've been involved {in Egg} from the start onwards. So obviously before the launch of Egg, we didn't have any existing business, and so it's been like doing a standalone startup, except that you're convincing the Board rather than a number of venture capitalists. It was very actually orientated around getting the financials and getting the business case for justifying what we were doing; and I think that ethos, if you like, almost perpetuated into the launch of the business. So, actually, I think to a greater extent than my experience with the Prudential, Finance was a facilitator more than a bottleneck. Because we were aware that we were a fast-acting and fast-moving organisation, we needed financial metrics as to make decisions rather than being the 'policemen' of the business so much, and obviously that's quite important.**
7. **GS – There *is* actually an issue about taking fast decisions; there is a point that PM stressed as well. There is a balance point between taking fast decisions and financial rigour. So, where I am leading the discussion is on the continuous role of Finance specifically about IT projects - and since the launch of Egg has been per se an IT project – and on the role of the Finance**



**Team from the conception of the project to its completion. How is this balance being achieved? Quick decisions versus the rigorous financial appraisal.**

8. TV – The way that the projects have tended to work – and I'll give you one example where we've worked on a large product development process – where my team worked really closely with the project and product managers from the inception of the programme; so we almost became part of the team. So, in terms of the process, I think it was actually the fact that we were almost put-in the project team rather than the project team at some point coming to report to Finance. And my boss, who was effectively the FD could then act as the game-keeper if you like, and to take the stuff that we came up with as a project team, and sort of then say 'Yes' or 'No' or 'we need more rigour', so we had the Finance Team working very closely with the business; but then having some elements of the Finance Department still acting as the sort of arbiters on whether this was appropriate or not. So it worked quite well in that sense. I think in terms of the IT aspect of it, the biggest challenge there is understanding the cost dynamics and the delivery aspects of it, and I think that is quite a lot of the work that we've done in the early phases really: to get really clear on those costs, especially when that part that we were doing was trying to build part of our differentiation, if you like, which arguably has been low cost. That's what the Internet dynamic brings to us; if it doesn't bring that, then we're failing, I think. So, we really need to understand that the key part of the financial system from that point of view is probably the cost dynamics.
9. **GS – Right. As in all IT projects, you have certain points where you have to revisit the project and see for example that you have some kind of change request; how has the Finance Team been acting as part of this feedback loop there?**
10. TV – The way that we structure things is that my team would be very much focused on the initial opportunity assessment, and so our job would be, together with the business, to get to a point at which the Executive team were clear about whether they wanted to proceed or not, and we'd present it; if you like, my objective was to make sure that – to the extent that we could - there was an accurate financial appraisal of the project at that point, and they could then make decisions about whether to go ahead into the project phase, the 'go' phase. And then at that point, it would start to be done by the, sort of, business-as-usual part of Finance. It would then operate as sort of much more standard process, whereby any changes would be run through certain sub-groups of the Executive; so there will be a budgeting process around it, and all the other normal stuff that my team will not be directly involved in. That would be over to the business-as-usual part of Finance if you like.
11. **GS – So actually, as you move towards completion of the project, you have a more disconnected role from the overall project process.**
12. TV – Yes, so my team in that context will be very much at the start, looking at the development of the product or service and that aspect of it, rather than the later on sort of 'OK, we're 2 months from launch and we've got these requirements and there's been a change'. That's more back into the budgeting and the sort of standard processes of Finance.
13. **GS – Right, I see. In any major IT project – even in smaller IT projects – you have something we call post-implementation review; what I would like to ask you there is, in what ways the Finance team follow the PIR in seeing if the benefits are being realised and if the costs have been on target and all that lot?**

14. TV – I think that's actually one of the things that we don't do very well, so we do have ongoing review processes but I don't think we've rigorously done PIRs on a lot of our projects. What we tended to have large projects which have either been made major successes, whereby the PIR would almost become an ongoing analysis of the business, if you like. So, we would launch something like Egg Card for example, and then actually very actively managed to understand the unit costs and other things on an ongoing basis; so it was sort of the PIRs become part of the process that now we run the business. And where we'd had less successful projects, we've not tended to do a rigorous PIR – which I think is probably a missing.
15. **GS – So, PIR if you like is not integrated in the loop of the project.**
16. TV – Not formally. I think it's done informally and to a certain extent, but it's certainly a missing in terms of a rigorous process. You *could* argue that some things are self-evident and so I think there's probably a part of the lifecycle of the business for which this is more appropriate where you've got more projects going on. There may be different levels of projects and the role I was doing was very much focused on big projects, which were new initiatives, rather than change implementation, for example. So, I suspect that in that part of the business where there were smaller initiatives which didn't come under my team's remit, they may have been other PIRs; but certainly for the big projects that I was looking at, it was always self-evident whether they worked or not, and they had worked, there was an ongoing review because we had to be successful, if you see what I mean.
17. **GS – Yes; doing a PIR is – I'm pretty sure you know that better than I do – a way of seeing if, even in failed projects, you have calculated accurately – if you like – the cost of failure and things like that. So, this is why I am asking these questions; it all comes down to making the process of investment appraisal more informed.**
18. TV – Yes, I agree; and I *do* think it is a missing in terms of what we've done.
19. **GS – Right. I just wanted to move on quickly to the investment appraisal processes and first of all I'd like to start by asking you about what the investment appraisal process is driven from?**
20. TV – At a broad level, I think, there's almost a strategic assessment, which is around 'is what we're doing fitting with our strategy?' and it gets very much from the top down; from 'what is our mission?' if you like. And then actually that is quite an important filter on assessing what we're up to. And then it is almost how much value we're creating in doing things in service of those things that are on our mission, within the context of our financial constraints. So, there's almost those three steps: is it in service of our mission? Does it create the most value? Does it live within our financial constraints? So, things like capital is a constraint; the P&L result we get is a constraint, development spend, to a certain extent, is a constraint, internal resources is a constraint. Obviously some of these things can be moved or we can get access to more of them, but it's understanding how things stack up with those measures but with the target of being on track to generate most value in service of our overall strategy.
21. **GS – There is this issue about value – and maybe that will sound as a naïve question; there are different ways in which organisations define value. For example there is what is well known in the financial literature and which is called 'shareholder wealth', the remuneration of shareholders via dividends etc, and there is the long-term value etc. I'm actually leading the question to the short-term versus the long-term. So, what I would like to ask you there is what is the definition of value from the Finance Team perspective there?**

22. TV – The way that I've certainly structured it was around DCF; cash flow to shareholders; so, the NPV of shareholder cash flows were the key thing we were trying to maximise. And the way we related it to short-term versus long-term was that we were seeking to maximise value clearly, but we had and have short term rate constraints around what is an acceptable shape of J-curve for example, and I think that is partly driven by City expectations, which we aren't necessarily limited by, but we need to manage, and I think that does drive a conversation about looking for value to measure earlier rather than later. But in a very pure sense, we were still about maximising long-term value. And although we would manifest these calculations as DCFs, I think it was also very important to ask that we've got the Executive team to understand them, not in the sense of mathematical equations, but actually as the value that we seek to extract from a given market with a given proposition and a given set of reasons as to what the value model is. So, for me it was very important that we linked to the value model, because at the end of the day, as the Executive is making decisions, part of the question you need to ask yourself is 'what do I need to *believe* in order for these value assessments to be true?' So, [a manager] is presenting to me 5 cases, and 3 of them are 1bn and one is half a billion and one is for 50m; that's all very well, *but* what do I really need to believe to be true in order for those values to come true? That's really what the decision they're making is; they're making a choice about something and they need to understand to make that choice in an informed way – and not on a set of metrics, but actually on a set of beliefs on what is going to happen to the market. And that's how Executives think about it; making these appraisals in reality rather than just, you know 'do I believe that this number is going to be 100bn in year-7?'
23. **GS – Yes, I see. What you've just said is actually leading me to the discussion about perceptions and assumptions, built into the investment appraisal mechanisms, or taken into account in these mechanisms. For one thing, there is the issue of perceptions of the organisation in the guise of organisational culture and the Executives' culture: what they believe to be driving value for shareholders and so on. That's at one level. At the other level, again, it's the assumptions underlying the calculations, which are very very important. What I am asking there is, obviously these perceptions and these assumptions are placing some sort of bias, if you like, in the way that the investment appraisal process works; how are these things taken into account? There is a dynamic there obviously.**
24. TV – I think there are a number of different types of assumptions; so there are assumptions about the market, which – to a certain extent – you can validate, but then there are things that are true today and were true in the past, which will not necessarily be true in the future. So, there's a set of assumptions about how things are now, which are facts to the extent that you can validate them, and then how things *will be* in that market, which you have a set of beliefs about. Then there's a set of assumptions about customer behaviour, which may be linked to that but it's slightly different; and then there's also a set of assumptions about how we as a business can lever into that – i.e. things like unit costs, development costs, operational capacity, functionality of the product or proposition. So, I think it's quite important to actually split those out and get clear the different sorts of assumptions that are being made in each. Particularly, you could have a very profitable market, you could have a proposition that you as a business could deliver perfectly cheaply and adequately and on the metrics you described that customers used, but clearly each one of those could just be not true; so the market could turn out not to be that way and customers not behave that way and you as a business could not deliver it that way. It's quite useful to unpick one set of projective financials and actually understand the underlying assumptions of each of those, to play back to the Executive what they need to believe on each of those, to allow them to see the implications of sensitivities. I think sometimes it is very easy to go down that



sensitivity route and pick the things that have the biggest impact arbitrarily, rather than actually looking to the sort of scenarios. And actually I think, in my experience, that it's very rare that you get 10% variation on a particular assumption; you actually find that it is either completely negated or it is true, or it is good enough; and actually it's looking at that sort of sensitivities, which actually are more useful sometimes.

25. **GS – Right, I see. You're obviously talking about things like sensitivity analysis and so on; where I am getting at is actually, as a project team and as a Finance team, when you're developing a business case, you're probably trying to sell, if you like, the project and the proposition upwards to the Executive...**
26. TV – Well, we sort of had a schizophrenic role, in a sense, because partly we were doing that, - as part of the project team we were playing a part being on their side – and also we were linking back into the FD and explain to them what we were doing. Now, they were going to be assessing this on an arms length basis, reviewing it from a detached perspective. And almost part of our job was to get the project team focus on things that we knew the Finance Director needed to know, in order to approve it - or not approve it, if that was the case; but the worst result for us, in a sense, was getting to the Executive team, and when they say 'Look, we haven't got this piece of information that we really need to make the decision'.
27. **GS – Where I am getting to, actually, is that one of the things that I'm investigating there, is the role of the investment appraisal processes and techniques, not as measurement tools but rather as political tools and as convincing tools. Do you see that role as an existing one?**
28. TV – I think there are two aspects. One part of the investment appraisal is actually very useful for the project team. I think the project team, in my experience, sometimes doesn't quite know where it should be focusing in order to put together a business case. So, if you have a defined investment appraisal process, part of that is saying that this is the sort of information that you need, and especially if you have a team that will work really closely with those guys, as part of their team, they actually feel empowered to go and say 'OK I now understand what sort of information I need to put together'. {pause} I was thinking about the sort of political aspects of it; I think the numbers can tell a lot of different stories; quite often there can be more subjectivity brought into the process, and I think, in my experience, you can find that if people's opinion is something that is not very strategic, then they can focus on the negative aspects of some of the scenarios. And vice versa; if some people think it is very strategic, they can actually focus on the fact that the whole investment appraisal is under eggs, if you like. So, it's not always black or white, I think. But I think things get a fair hearing, in the sense that by having that investment appraisal process, there is a process by which things can be heard.
29. **GS – Right. Do you see that there is some correlation, if you like, between how detailed the numbers behind an investment appraisal are, as to what is their role as a convincing tool? Or is it just purely a political thing? For example, no matter how rigorous or how simplistic, if you like, the analysis may be, it can play a positive or negative political role in making the project move forward.**
30. TV – It's interesting because I think an absence of detail can go against a particular project of someone wants to hold it against it. So, a really well thought through and detailed assessment of unit costs that we did in some of the projects I know actually helped convince some people that these were projects seriously done. For some people will be looking for certain things, looking to the extent that at which they manifest in the investment appraisal, not just from what we, as Finance, have



done, but also what the project team has contributed. Again I think it goes back to the thing about splitting out the 'do you believe that there's a market opportunity for this given initiative?' versus 'do you believe that we can play into it?' And actually sometimes that is really powerful in divorcing the conversation to maybe the case that someone doesn't like a project because they don't think we've got the right solution, and not that they think that there isn't a market opportunity. It has been quite useful in splitting that up so that you actually give the project team the right steer, which may be "This isn't the right proposition for an opportunity we do believe in", as opposed to "We don't believe in this opportunity, no matter what proposition you come up with".

31. **GS – I see. One thing I would like to ask you, regarding again the investment appraisal processes: I'm now trying to focus on costs and benefits, and there are notably two things: identification of costs and benefits and there is the measurement of costs and benefits. Throughout the project process, in which you said that the Finance team – at least in the beginning - is an integral part of, are these two processes separated, or are they unified? I mean, the people doing the identification, saying for example 'we can have this or that cost saving and we can have this or that benefit', are they the same people who go into the detail of seeing whether they can measure those benefits or those costs? Or is this part of a linear model where you first identify them and then pass on to a different Finance team and they're trying to measure it?**
32. **TV – I think in different projects there are different answers; so, in some of the big initiatives we've done it's been really really useful, for example, in a new product development, to get the guys who were identifying the costs together with my guys who were trying to measure what the cost implications of those particular cost items are, and do that process together, because that's really powerful in terms of understanding especially new developments, where you're finding potential new processes for the business or new propositions for the business. The confidence you have around the costing depends very much on understanding first and then do the costing, as to what to do with the costing. And similarly with the benefits. With new stuff, it's understanding the beliefs around what are those benefits that the Finance guys need; so, I think, certainly within a big new initiative, those have been where certainly my team working with the business, would have the Finance guys working really closely with the people in the project team doing that identification; whereas in what we call business as usual, i.e. ongoing business, incremental improvements and things like that, it actually may be separate, because there would be no need certainly to tell those people what to do; they would understand, so we say 'look, we've got these extra costs and these extra benefits'. They would be out there and they would understand how to quantify them, because they wouldn't necessarily need the understanding about what those items were and how they impacted.**
33. **GS – OK. Again about the investment appraisal methods and people involved in it, and especially from the Finance team, there is this issue of short termism, if you like. When you're trying to appraise any kind of investment, you actually have two sides of short-termism: the one is that the methods themselves – and I take it that the methods you're using are the traditional financial methods, NPVs IRRs etc – have a certain gearing to the short term, because by definition financial methods are more about what kind of projections you can make for a certain period of time, given that there is an increasing amount of uncertainty as you move forward in time. The other is the issue of short-termism on behalf of managers and people doing the appraisal in that, for example, the schemes under which they're being rewarded are based on their performance *this* year, rather than on the long-**

term performance of the project in ten years time, so to speak. So, how is that dynamic developing there? I am talking more in terms of issues like accountability and the reward schemes and what is their role in *driving* investment appraisal if you see what I mean. For example, when you're rewarding people on the short term, they have self-interest for appraising the short-term.

34. TV – Interesting question; one if the things we do in terms of long-term investment appraisal is not necessarily to load up the risk discount rate, which I think does tend to have the impact of what you're talking about, which is to sort of devalue cash flows in the future. We tend to actually have a minimum hurdle rate and then to look at different scenarios – to reflect risk by looking at different scenarios, and if we think there are a number of different scenarios because it is a risky project, we look at the NPV on that basis rather than trying and artificially increase the discount rate. Because I think that *can* lead you to wrong decision-making between stuff. So, I think, in terms of value assessments, we do take into account hopefully longer term stuff and also we do look at the value of the proposition to the consumer, I think, quite strongly; it's quite important for Egg; so, it's almost like "can this persist? Are we building something that persistently lives with the brand and lives with our mission?" It is almost just as an important part of the appraisal process, although non-financial, as the financial appraisal itself; there's really got to be a big enough value opportunity for us to prioritise it. And to the issue about short-termism, I think, which is quite an interesting one, obviously there's a list of companies we have share options with the Executive team, as one of the measures of incentivisation; there's also bonuses that are linked to the short-term performance, but they tend to be things which we believe – don't know whether it's true or not, but we believe – are on track for us to create long-term value.
35. So, if they're short term, we interlink them around hitting P&L targets for example, which we believe are around what the City needs us to hit, in order for us to be credible to go on and create a business. So, one interesting example of that, that I noticed, is that we had a very different internal reaction to the choice of two projects: one was a case where we were taking a stake in another company versus another one where we were investing into developing a new product; and they were ironically for the same amount of money. Because one was a capital investment, - obviously the same shareholders' funds were being used but the one was a capital investment – it was approved very very quickly and Pru being the largest shareholder, their reaction was "oh, 10m pounds is nothing! Why worrying? It's a great idea; go ahead and do it!" So, that involved quite a simple assessment and then a Board meeting, which approved it. Whereas the 10m-product development investment would hit Egg's P&L and actually stimulated a much longer and more lengthy and more in-depth process around investigating the implications: "Do we really believe it? Do we want to spend that here or do we want to spend it on something else?" But then net result of both that spending would be the same into the shareholder outflow. So, that was quite interesting.
36. **GS – Probably that has to do with what the internal beliefs are on how development pays off, whereas, for example, acquisitions is again long term value but people are more acquainted to it.**
37. TV – The reason I found it so interesting is, I think, that it was an investment rather than a full acquisition; we took out a share in quite a risky company, which turns out not to be that successful, but the attitude of our business towards it was that because it was just a capital investment – and in the scheme of Prudential's capital investments it was next to nothing – but they didn't take into account those factors that you just said; they just said "this looks like a good idea, so go ahead". Whereas, because we certainly set ourselves very tight P&L targets, certainly in our bonus structures and things, actually we agonised much more over a decision, which actually, if you were taking a step back and look into it strategically –which is

what I said we try to do – you may have actually opted for that investment for priority over the other one.

38. **GS – So, it's like taking account of each of the projects under different models, if you like.**
39. TV – I'm more saying that your point about short term targets, that this was an unintended consequence of having a very P&L-focused target, and not a capital target.
40. **GS – That's really interesting. Sticking on the methods issue, is there an explicit treatment of what we call uncertainty as opposed to risk? And let me explain what I mean there; in the literature, uncertainty is something that has both positive and negative connotations, so uncertainty includes opportunity as well. Financial methods have been treating things like risk as the possibility of earning less than expected; is there an explicit measure in place in your investment appraisal template for taking account of opportunity, if you like, in financial terms? Things like for example ROV, if you're familiar with it.**
41. TV – It's interesting, I think, we found the concept of options quite useful in *communicating* some investment appraisals rather than the technical methodology, if you like. So, a particular investment we made, it is very useful to communicate that in terms of options, because it involved a business where we were trying to create a standard; and so clearly we would or wouldn't create a standard. There was no grey area: you wouldn't have half a standard {laugh}. So, by creating a standard in a market, we would have accrued certain big income streams, whereas not creating a standard clearly means not being successful at all. It was almost that the development cost was almost an option cost on that outcome, and we could quantify the opportunity space as we saw it; so, what did you need to believe in order for that standard to give you a certain economic outcome, and then almost get the Executive to understand that they were buying, by this development, an option on that value, and being clear that the alternative outcome would clearly be zero. I think that was a great example of where the classic "here's our business case and here's a +/- 10% sensitivity" really didn't communicate at all the investment decision needed. But we didn't really use any option costing mathematics, if you like. It was more about conceptually get people to understand. So it was a communicative tool rather than an appraisal tool.
42. **GS – Right. Are you considering at all using it in the future as an appraisal tool at all?**
43. TV – I think we would if we thought it was appropriate; certainly some of the stuff that I've done in the past is quite uncertain. The range of outcomes was large and not really modelable. So, to the extent to which things are more predictable, or the level of unpredictability, if you like, is quantifiable, then those sort of approaches are more useful; whereas I think in some of the projects we've been doing, it has not really been appropriate. But I can see us using it certainly.
44. **GS – Going back to measuring specific things in financial terms, which comes more to the tangible vs. intangible side of things, are there attempts to quantify things that are traditionally thought of as intangibles? And I am referring to things like costs or retention or recruitment, things like activity rates and so on. And all these things boil down to customer loyalty and the like. Are these things being monitored and used into the investment appraisal process?**



45. TV – It's interesting; I don't think we've got at the bottom of this, but we started to look at this question in terms of understanding our cost base and actually understanding how it splits out between 'good' and 'bad' costs. If you like, there are clearly costs, which are unit operational costs, like back office costs, on which you really want to go one way, which is to make them cheaper. Whereas there are other costs linked to the relationship with the customer, where more investment in there, may actually drive more value; so, actually there may be a *better* unit cost, which is *bigger* in customer service than meets the eye; and I think there is a danger in just appraising everything on a unit cost basis and looking to drive the cost-income ratio or this sort of cost ratio downwards. I think we've started to think that way and we've started to identify this sort of costs. And where we are investing in relationship with customers, we have identified that and we are looking for ways of measuring the impact they make, although we've probably not got very sophisticated metrics in place for those things.
46. **GS – But you are looking into coming to a wider understanding of that.**
47. TV – Absolutely. And certainly acquisition costs, because of the business we're in, we focus on that as something key, which is to get customers in. And obviously we're focusing on getting the unit costs for that down, but we see that as a key value driver because we understand that as a customer value attached on every customer we acquire.
48. **GS – There are other IT-specific costs and benefits, and I'm more talking in terms of benefits here rather than costs; and I am talking about effects that are specific to IT like what I like calling the 'spillover effect' where you have an application system built in one department, which is affecting the organisation throughout. Issues like rationalisation of systems, or even issues like the improvements in quality of work that people do, migration of customers and all these things. Is there an orientation towards measuring all these aspects, which are more IT-specific?**
49. TV – Again I think this is something that we have started to see as important, but we don't really have the structures in place to do. Maybe we have that in certain places, but certainly it's not something we've done rigorously to date. Probably as a consequence of most of our IT programmes being focused around development, to now as a more maturing business where we've obviously got more ongoing initiatives of which the dynamics we need to understand. We should probably be doing less well than we're doing with the development initiatives.
50. **GS – There is a number of IT-specific techniques for investment appraisal; if you like, these exist more in the guise of models rather than financial techniques per se, that are geared to IT. Are you aware of those at all? Are you looking into implementing these? Not replacing but complementing your appraisal processes with models that are more geared to the IT side.**
51. TV – What would an example be of that sort of model?
52. **GS – I actually have a list of those and it might be useful if I send it to you. One for example is called Return on Management, another one is called SIESTA, which is an acronym, there is one called Information Economics, one called Investment Portfolio, Investment Mapping; all these are examples of such methods. Some of them are the type of portfolio methods where you would have the classical quadrant portfolio thing where you would place where your business is and where you stand from an IT side, a business side etc, and you're trying to make an appraisal based on that. Is there any research, if you like, on behalf of Egg to adopting methods that are not traditionally financial?**



53. TV – By and large, we're focused, as I said before, on almost a strategic imperative, and assessing that as the key driver. Things like the Balanced Scorecard for example, we found quite useful as a concept, especially for managing the ongoing business and sort of monitoring the qualitative targets and reporting on some of these as to the service levels and other things, as well as our financial ones; but certainly in investment appraisal we tend to stick to the approaches that I've talked about, and I think the way that we related to those other particulars is useful; and anything that can paint the picture to the Executive team about the strategic and tactical side for where we're playing, and sort of explaining the business model, and the softer issues around the financial appraisal just as the numbers about whether we want on don't want to do that. But as to specific other techniques, I don't know. So, we'd be open to that kind of thing, but there might be some people in the IT area who are thinking of using those concepts, but certainly not in Finance at the moment.
54. **GS – I see. There were a few more things I'd like to ask but, given the time constraints, it might be better if I send you an email or if we could follow up some time. Just a few things before I leave you. Given that you've seen more or less what I'm investigating, are there any other people, any of your colleagues that you would find useful for me to speak to in Egg, about the issues we've been touching on?**
55. TV – I don't know. I think in terms of new initiative evaluations, somebody who's working in my old team now would give you the same story I've given you so it wouldn't be that useful.
56. **GS – Well, I was speaking not only in terms of Finance but also from IT.**
57. TV – There might be someone in the IT team who I could put you in contact with. I can have a think about that.
58. **GS – I can remind you about this in my email. The other thing is: would there be any type of documentation like any type of template – I'm not of course looking into numbers or anything like that – that you could share with me, regarding the investment appraisal processes, project prioritisations or project approvals, so that I can have a more solidified view as to what are the templates that you're using? Of course all these are going to be treated confidentially just as the content of this discussion. So, I was wondering if there was anything there.**
59. TV – Yes, there is; you might find it a little bit sketchy, but I think there is something I can send to you certainly.
60. **GS – Great. Final question before I leave you: Do you think that there are any areas – within the financial appraisal of IT that we've been talking about – that I am not looking at and that I should look at?**
61. TV – No, I don't think so. Can't think of anything off the top of my head.
62. **GS – Alright. What I will do is that I will send you an email with some of my questions and to remind you about contacts and documentation. We can follow up on that.**
63. TV – In terms of using this conversation in your work are you going to quite Egg directly?

64. **GS – No, I'm not quoting companies or names of people that I've been speaking to. In these terms, at least the appendix where all the interviews will be – and of course there won't be any names there – confidential. I will send you this transcript and, apart from the fact that names are not going to be mentioned, I wanted to make sure that I am not misinterpreting your words in any way; so, I'd be grateful if you could have a look when I send it and see if there are any parts that you would like amended at all.**
65. TV – Alright.
66. **GS – OK. Thanks very much for your time, sorry for taking up more than 45 minutes and I'll send you an e-mail.**
67. TV – Great. Bye.

#### **4. BANK OF SCOTLAND**

#### 4.1. Interview, 10/06/2002

1. **GS - I would like to start by introducing myself, telling you where I come from, so that you can understand what I am about, and then we can discuss a few things about Internet banking; the main issues being strategic, issues of implementation, and some issues of expertise relating to e-banking. So, I am originally an Electronic Engineer. I trained in Greece; I worked there for 3 years as a networks engineer, then I did an MBA here in Edinburgh. {GT enters the room}**
2. **GS - I am doing my PhD for the past 3 years, and I am a Research Associate with the University of Edinburgh; I work in an e-learning project. My PhD is about Internet banking; specifically, it is about investment appraisal for Internet banking projects. And I am also looking into more wide issues around Internet banking in the UK, and specifically the ways by which companies go about appraising their investments in IT and e-banking ventures. I was – when you came in – just about to ask IH to tell me a few things about his background.**
3. **IH – Well, very briefly, my background is not in Internet banking; I was a branch banker, then went into a couple of departments, then did the MBA and then worked for Corporate Banking for the rest 5 years or so. So I have very much a lending role, a relationship role with customers; not an IT-specific role. So, I know you've come through myself because of my previously doing the MBA, but maybe GT would be more appropriate [to answer your questions].**
4. **GT – Yes, I came from branch banking, I went through what we're calling banking exams and became a professional banker; I was always very interested in IT; I switched into IT. I was involved in the setup of the DOS and corporate banking system; then I was involved in the migration of it to a Windows environment and also in developing the application; so bits and pieces of my code are still in the application as such; they're with customers today. The next thing I am involved in is taking that from the Windows environment to the Web environment. In the between time, I was also UAT (User Acceptance Testing) manager for the bank's retail Internet banking system. I was put in manager for the bank's Internet public gateway, which is some kind of equivalent to a Net bank or something like that, where vendors can use our system online; with the most interesting project to be the engine that drives Tesco's Point-of-Sale debit-credit cards rather than on the physical terminal, the web interface. That was quite successful. We did it quite cheap as well; we did it for 300K. We did the bosinternet.com which is the free ISP when ISPs were the big thing; and project-managed that system. So, they've all been successful deployments; looking back, one or two of them, some of them were at hype at the time. But my core background has been on corporate banking and sales services.**
5. **GS – I see. Now, when the idea of Internet banking 'visited' the Bank of Scotland, what was the general perception of people about it? What did people believe that the Internet would do?**
6. **GT – Probably one thing in BOS that wasn't the same to other banks was that we had the HOBBS system from 1985. The problem we had with deploying the HOBBS system was that physical equipment at that time, PCs and things like that, were in customers' locations; so we had to encourage them to buy a dumb terminal, which was about 200 GBP<sup>2</sup> subscription for 1 application terminal. Later on, we then started discounts. So we were always of the opinion that once we got customers**

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<sup>2</sup> 200GBP one-off fee for user equipment plus 10GBP/month subscription.



on the system to use it, they loved the system, but we had this problem that we had to provide the terminal; later on, when PCs became over age at the corporate end of the book, we developed the DOS system; we didn't have to worry about equipment anymore, because customers already had equipment. So, all we had to worry about was developing the code and giving them access to our mainframe through a dial-up system. So, that's the corporate side. Sticking to the retail banking side, the opportunity we saw on the Internet, was that, now, with a big uptake of PCs at home; we could deploy our services over the Internet centrally. Any time there's changes, we only needed to update them centrally. We don't have all these old terminals beginning to go on the blink. And companies no longer exist that built the chips and things for these terminals so you can't repair them very easily. For us, it was a way of migrating out of the old HOBS system, putting all the volume down and that sort of thing.

7. **GS – Right. Now, in terms of the core banking operations, you said that the Internet was seen as a way for migrating from your old system. I think this is powerfully related to the Internet hype and what people wanted out of the Internet. In terms of how the new channel was treated, was it about replacing the branch or was it seen as an additional channel?**
8. GT – It was certainly, for the BOS, an added channel. We had the electronic channel already; we just were not getting significant volumes of it. We did pretty good business, and we charged them 10GBP/month for the use of our systems; so we were making a bit of revenue out of that model. Hundreds of thousands of accounts were being accessed over that system, so what we were able to do when we got into the Internet, was to get rid of the hurdle of the equipment; it just then became a form-filling exercise to actually enable the customer, by giving them the URL, to access our services. And, typically, what we've seen in terms of BACS payments, even though a typical retail customer might only do 4-5 BACS payments/month, that's the equivalent of spending 10-15 minutes over the phone talking to a call centre agent, which you're taking away, and they're doing it themselves – self-servicing – at their convenience. So that was probably the biggest benefit we saw there. The other thing the Bank of Scotland took the opportunity to do, was that we deployed this IBM Visual Banker system whereby we had a single customer view, so the agents' desk at the call centre were seeing exactly the same as the customer was seeing on the Internet; so if you create a payment on the Internet, this is also visible on the call centre system; whereas in the past, all of these systems were separate: The payments were in the HOBS system, but they went on the Tele-servicing system; so, the Visual Banker system brought everything together. There was also the IVR (the BOS voice system, where you can get a balance or do simple banking over the phone by voice response); these all are integrated to the same system. So we now have a complete view of what is going on without hassle.
9. **GS – So was it actually a change of customer interface, rather than a change in the whole system?**
10. GT – It was all made from scratch. So, the HOBS system that we had, never leveraged any of that technology. The system was new-built.
11. **GS – In starting to implement that, what were the main problems you've come across? Were there any surprises?**
12. GT – The biggest problems we had was data quality, whereby you've got this thing called Customer Information File, which is basically looking up a number that identifies a customer uniquely. All the customers' accounts are connected to that file. So, effectively, by going into the Internet, we released that file on to the Web. And what we found was that there were quality issues in that some of the

maintenance had to be done to keep these records up to date, so there is a risk that we released [outdated information]. An example would be that if you have an account and close it, the account number is then churned after 6 months to someone else. That account number then starts getting used and then pops-up again in the original customer's linkage. So, before we could release the system, we took a 6-month headline releasing the code to the customers. It was a huge task to resolving data quality issues. So, that stuff came out towards the end of the project; we didn't see into it before. Now, data quality is at the top of the agenda; all big projects, particularly customer-facing projects are data-clean.

13. **GS – So how did this crop up?**
14. GT – It was just an initial test that we released the code to staff. Some of the staff came forward saying, " I'm seeing this other account. It's funny, because this account didn't belong to me"; and the churn of the account numbers between staff of the bank is probably more than the churn of, say, a normal retail customer. A typical member of staff will have certain products, which they always open and close, like mortgages or loans; a typical BOS retail customer has about 2 products; so it was quite neat to test on the staff, because the anomalies came forward quicker.
15. **GS – Right. Now in relation with investment appraisal issues, the problem that you just referred to, was it in any way costed? What I mean is, after you found it, was there a financial estimation of the costs incurred because of it?**
16. GT – Yes, because we looked into getting specialists in from IBM and our head squad and did an appraisal where we reckoned that the bank staff were the best placed people and understood the problem; they were best placed to actually cure the problem. And we had a series of programs that we invented, that broke packages and rebuilt them, you know, in a big manner. For us, it was a 6-month head [time]. Because we were releasing the product to business banking as well, we were able to release the business banking just about on schedule. Because it is a small proportion of customers, you'd almost eyeball every connection. So, we got the delivery – I think it was October 2000 – of business banking; we did get the staff out there; it was the retail staff; it was a 6-month project because it took 6 months to tidy all the data up. We're talking about many millions and millions of customer files that had to be tidied-up.
17. **GS – Right, I see. When the project was being set-up, were there any provisions made for organising new bodies and project teams? Where I am leading to is actually seeing how the implementation of such a project may change the organisation's functions. The Internet banking operations were quite a big project; were there any new departments developed from it?**
18. GT – Yes. Business Banking developed a new call centre that was able to support these customers on that system. Retail banking retrained nearly all of the retail call centre. So, it was existing functions but new training and new procedures and business processes that went into this existing system.
19. **GS – Was that a part of the project planning, was that something that came as a result of [implementation progress]?**
20. GT – Well these things were identified early on; because we were putting, for instance, the business banking call centre and all that, was all done well in advance. And to do the launch, all those things had to be done obviously. It was a huge project, the whole Internet retail-banking project; many hundreds of people involved.

21. **GS – By the way, how are you for time?**
22. GT – Still have 20 minutes or so.
23. **GS – Let me now just move on to the investment appraisal issues and get into the way that the bank treats the different investment projects. Is there a case for treating IT projects in a different way that you are treating any other types of investment; capital investments and so on?**
24. GT – I would say, for IT it's even more rigorous. Because it's really timed-up particularly since the merger; we have a whole process now to getting an IT project approved. There too many aspects in it, if you like; the business case which is reported in a 50-page document, there is a full financial appraisal – it probably takes someone in the business a couple of months to get that approved – then you get approval from not just IT; the corporate banking IT business projects are getting approved by the CEO of Corporate Banking and various other Heads of Corporate Banking within IT, IT Strategy and the group of Finance. It has to get signed from all these people. If there is a problem with it, it just gets rejected and the next opportunity you get is the next month's board to re-issue the business case. Then you've also got another big document, which is the technical design overview; you have the whole technical solution ratified and approved by various people: IT, IT Strategy, IT Security. So, there's quite a lot of hurdles to get over. I would say, probably, over 10% [of the projects] get through the process. The process is really deployed to get rid of the chaff; it's so that only the best and the most cost-effective projects of the bank get through.
25. **GS – You mentioned that there is [in projects] the business case, the financial case and so on. Is there an issue of politics getting involved? I am talking in terms of power relations within the organisation. I don't know if this is something you can talk about.**
26. GT – Well, at the end of the day, there will be particular people who particularly want a project to do well and for a particular project to go even; at the end of the day, paperwork still got to stack-up for all purposes. And because you're going to so many divisions of the bank to get approval, it's very difficult for one area or one individual to unduly influence the project, because it's a decision being made across the organisation; cross-sectionally. And the kind of projects that we've developed over the past, is nothing like the ordinary kind you would see that Barclays or Abbey National or someone like that created. All of it is probably fashionable as well: the way that the stock market would look upon you, and you are the only bank that didn't have an Internet banking system, for instance. The first Internet banking system that we've put in was a tactical one in 1999. That was a system that we only scaled at 40,000 users, but we did it in 6 months; it was a 6-month project to show the market that we had Internet capability; then BOS made the strategic version, which scaled to 1m plus customers.
27. **GS – In the project you are talking about, regarding the role of financial appraisal, what is actually the role of this part? I am specifically looking into the financial methods being used. There is a finding I got from interviews with other banks, that nothing really specific to IT or very sophisticated [method] is being used. What is the case with BOS?**
28. GT – Well, it is probably easier for me, and the kind of projects I am working on – with business and corporate customers, where corporate customers pay for services – it's quite easy to say "we charge this for this transaction" or "we charge this monthly rental"; so it's very easy to take that and scale up the customers that you can add up to the system, and say "Right. This is the revenue that we're pulling in the next 5 years. This is how much it is going to cost. So, if we're going to



take capital spent here and out the other end we're going to do more business". In retail it is more difficult. Because if you were to look at the revenue of the service (a) you give it away for free, (b) BACS payments are given for free to the retail customer and you're paying 2% interest on the customer's account; it just is like that; it's part of being a bank. You have to provide these services. But there is some attempt made using research where we try to quantify the value of each customer who banks through the Internet channel compared to using the service through a branch or through a call centre. And there is definitely a pattern. And the pattern is in terms of the actual cost given to each of them. But we are definitely servicing more customers through the Internet than we can do through the branch. I think there's a difference between selling and servicing. I think the Internet is definitely about service. Selling is definitely the branch. You have more chance to sell products through the branch network; we would treat them as very complementary.

29. **GS – Is this something that you take into account in the investment appraisal process? Let me refer to a report back in 1996 by Booz Allen & Hamilton that calculated the cost of servicing a customer over the Internet to be very low. Of course this report is now hugely discredited. [SOUND LOST FOR APPROXIMATELY 30 SECONDS]**
30. GT - .....to replace that component as well. So it was also an opportunity to replace all the components within the architecture; so the cost of the whole programme, given that it is expensive, the bank would deploy that as one-time sunk cost. This is what is going to take to enable us. But I think the pattern that I've seen with all the banks in retail, they've all created their Internet banks and sit back; they're not putting heavy investment for the last 2-3 years.
31. **GS – There is a case argued in IT about quantifying intangible benefits. Do you see any value in that?**
32. GT – At the end of the day, I think, if all the banks are going to have Internet banking and it is successful, and particularly since we merged with Halifax, we've pulled the most online retail customers in the UK; and if you took that channel away, and all the services went back to the existing, old, infrastructure, we wouldn't be able to cope. For example, we've seen in the early days of retail Internet banking, there were outages; and call centres couldn't cope with demand going back to the telephone channel; because the banks can downsize their call centres, reduced the number of staff they got; or what would generally happen would be that the bank would start to redirect them to other activities, selling activities and so on; it has released the staff from mundane procedures.
33. **GS – Going to Corporate Banking, what is the role there for the Internet banking system?**
34. GT – Well what I've found out working for the bank for the past 2 years is that one size doesn't fit all, in terms of the retail and SME Internet banking system is not suitable for the corporate customer and is not scaleable to the direction we need to go. So, the only online service we've got at the moment is a system called Corporate HOBs and it's a Windows based system whereby customers are filling all the data offline and create the payments and release that in the afternoon. What we found with that system, is that it is not scaleable; we had a number of technical challenges throughout the past year; we had to do some creative stuff to keep the whole thing ticking over. So, where we see that going, is that we are going to migrate that system on to the Internet over the next year and a half. And we've got a project underway to do that; and we've taken a clean sheet and created the application for our customers' requirements, rather than using the retail customer service. The key differences with the corporate system is that particularly a



corporate customer self-administers the system; so you have an all powerful system where the admin person can go in and create users, add permissions, facilities, payments, can cross-authorise others etc. There's a whole business project for developing that system; and the project we've got underway is the largest Microsoft .NET project in the UK. We're using .NET and XML to bring together all these banking systems, SWIFT, CHAPS, CBS (Core Behind System), which is our financial system, Branch Accounting; so we're bringing all that service through the Internet.

35. **GS – That actually brings me to some of the attempts that were being made in the past from different banks (Lloyds who did Create and MLHSBC with their high net worth proposition), which refers to the 'one size fits all' kind of concept. They were both high net worth propositions. Why do you think that these attempts didn't work?**
36. GT – Well, it's a completely different thing than what we're offering. I mean Create was, as we've seen in other business cases in the UK, [assuming] that there were probably 1bn people living in the UK. Because there has always been this mythical customer base that they're after. Particularly with Create, there just wasn't enough high net worth individuals kicking about, and with the market downturn they weren't anyway; I think that where all these banks are subject to criticism is that they believed with these Platinum accounts, customers would pay money for these services and there is this extra functionality they get. But is it really worth creating a service like that? Plus the other thing, particularly in the retail market is that customers are particularly reluctant to change accounts, because it's a hassle; it's always very difficult, whereas with a business or corporate customer, generally, pricing is a big issue; so it's worth the chance moving. Because the difference between one bank and another bank can be something like 100K/year cost-wise. So, it's worth the effort of churn. With the retail customer, the difference might be 10-15GBP/year. It's not really worth moving. The difference with the Internet corporate system that we are developing is that we are predominantly servicing existing client base. The volume of these customers and the value of these customers to the bank merits giving them a new system.
37. **GS – Has BOS seen the Internet as a means of acquiring new customers?**
38. GT – Obviously, Intelligent Finance, who's now part of the Bank of Scotland, that's the whole reason for their existence. And IF who owns something like 300K customers, got these customers over the last 1,5 year.
39. **GS – Regarding pure plays, as BOS is an incumbent, do you see any threats? There is an idea about the decomposition of the banking model in a way similar to the utilities; production, distribution, supply. There was the contention – I don't know if there still is – that a firm holding the technological expertise can compete head-to-head with banks. Do you see that this is plausible?**
40. GT – Knowing the technicalities behind being a bank, rather than the bits that you address, they completely underestimate them. You've seen things like Virgin trying to get into banking with the Royal Bank to run their systems; you just don't have the same leverage when you have a big bank behind you to pull the strings; decide how much they're going to charge for any activity. In the UK, where banks have proven banking capabilities, I don't see how they will enter [the market]. I think where there is more interest in the future is cross-European mergers.
41. **GS – So do you see the future of Internet banking developing around banks taking over other banks and this type of thing rather than something**

**different? There is the idea, for example, of the customer base where companies with a strong customer base, getting into e-banking services.**

42. GT – If you ask different people at the bank, they have different views; my view is that such companies will surely headhunt most of their staff from banks to figure out how to run an Internet bank. All the banking regulations, APACS and so on; costs: bringing yourself up from scratch; it's similar to the things that the bank faces with offices in Europe. We've got an office in Madrid for instance. And from day one, the first thing you have to do is to comply with all the local regulations, and it's a huge capital investment just to bring yourself to the bare minimum before you knock on someone's door and say "do you want to bank with us?"
43. **GS – Now, in terms of the issue of expertise. There are research findings that during the 90's new banking technologies gave power to a new class of experts: the financial services IT experts. What would you say is more pertinent currently – with the emergence of Internet banking – banking expertise, IT expertise, or is there something else?**
44. GT – One thing we found was that just getting the IT people to do your IT – and not understanding the banking – was a huge issue. People from the business had to explain all things to the IT people in terms of the business logic. So there's very much a partnership between us and the IT people. One or two very good IT people have now kind of crossed into the business. Through that process, they know how it all works now. I spent the last couple of months bringing our Belfast e-commerce people to speed with the business logic in the corporate banking; and in a number of calls I get from them, they're now talking the language.
45. **GS – So what you are saying is that there is a complementary role.**
46. GT – Yes. In some of the worst IT projects I've seen, when the IT project is developed and then it turns out to the business and goes ready, the business is ready to take it onboard and deploy it. You do simple things like getting PCs or desktops and train the staff; and the staff understands why all these things come along. It always used to be partnership business right from cradle to grave. And most of IT projects now at the bank, is probably business-led IT; so the business part defines what is needed.
47. IH – Change management as well.
48. **GS – Absolutely, change management comes quite loudly lately in the banking world; there were a few things that I wanted to ask you regarding change in the organisation and workforce issues. Was there ever, or is there still, the perception - for higher, mid or lower management – that Internet banking is displacing people? Taking over their work & expertise? Something similar to the case with robots displacing workers in the 70s.**
49. IH – I think, as a non-Internet banker, I don't think that our staff has ever taken the view that there was a major threat to the day-in day-out job; I think that, as GT said, it's complementing the business and the services we provide. That's been more the angle; we've actually seen a benefit of getting less phone calls coming-in to do simple account maintenance or transferring money – these are the key ones – so, if we can get our customers to adopt into the new offerings, they [the staff] see it as a benefit; they don't see it as a threat.
50. GT – What I've seen is that more staff which has been dispersed over the branch network all over Scotland are brought back to Edinburgh, probably due to higher demand for skilled jobs. Because, complementary to the people who are now left in the branches, you now have this Internet channel. I suppose the only thing that

might happen, in the longer term, is that you may have less new jobs. The net effects of the existing staff will probably set off the number of new employees taken through the branch network each year; because we had branches manned with 20-30 people, that now are being run with 8 people.

51. IH – The business is set to grow quite quickly; that will keep the existing staff busy.
52. **GS – So, it is that people in the bank see it as something that makes their lives easier and helps the staff manage higher quality of work. Is this the case?**
53. GT – Yes; I think before if you were in accounts services and you might be serving 20 people in an hour with fairly easy and mundane transactions, you're now maybe getting more interesting and complex transactions, in foreign exchange or something like that; if there is someone coming into the branch who has a more complicated transaction to do with the fact that he had to come into the branch to seek advice, obviously that gives you the opportunity to cross-sell car insurance and that sort of thing.
54. **GS – Was there any other effect on the operation of branches that you have noticed?**
55. GT – Well, the biggest change in the 90s was the centralised processing areas where before you would go in a branch where you've opened a mortgage – the maintenance, the keying, the terminal, the back office were all local; what they did in the 90s was that they brought all that maintenance to HOBS. So, you would have this economies of scale, rather than one person getting the odd mortgage application processed in a small branch, there are now people dedicated to that kind of processing and they're constantly doing them; so they're constantly up to date with all the rules and regulations and procedures. So they're doing the job fast because they get the whole volume done, rather than the odd one or two. Because we sell about 100-200 products; and they're medium to small size branches that deal with these products; and they get these all the time; like, once you've trained them in this process, you can't take these people out of the branches, because you'll leave the front-line sales service unstaffed.
56. IH – The actual level of experience and staff grades in the branch network are now less/lower than previously required because, even in credit terms, the approval process has materially changed and is now run on a centralised sanctioning basis.
57. GT – The hierarchy in this whole management was key; you had them in every single of the 300-400 branches; it has been centralised now to single structures, to each of these big 'silos'.
58. **GS – Would you say that this was a contribution, or –say- an effect of the implementation of Internet Banking?**
59. GT – It's an accumulative thing; I think the first thing during the 1990's was the centralisation of process; and talking about Internet Banking, I would say the biggest impact is this centralisation process; In Internet Banking has continued that; it hasn't had such a big impact.
60. IH – has been more gradual as well. There's nothing like a sudden big hit. If your operational support just opens-up, suddenly staff move their branch and all the work is being diverted-off, because the Internet [business] is kind of just growing.
61. GT – I think it's 'no', because what we had...we had centralisation process, we had call centre services and now the Internet; what I think has happened is that call



centres have been able to stabilise the number of staff they recruited, or even reduce or re-target them to other activities – more sales-orientated activities – more proactive stuff, and the Internet to the more mundane stuff.

62. **GS – Right. One of the things I wanted to ask you before regarding Investment Valuation: There are some Investment Appraisal techniques, which are getting quite popular lately; one of them is Real Options. Do you see any value in using these?**
63. GT – We've got some fixed criteria on our investment model; and we work on return and risk, IRR, these we concentrate on.
64. **GS – So you're not looking into using different methods for appraising... It's a standard way.**
65. GT – Yes it is a standard central template for HBOS; and that covers BoS, Halifax, Birmingham Midshires, IF. It's basically the same process for all these disparate companies of HBOS. So, business cases are looked upon across the whole group; because you make or lose money for the whole group. You know, not just because [a project] particularly has got an easier rate behind it, it gets signed-up. You know, we've standardised the whole approach.
66. **GS – Right. Have you actually come across things like, for instance, valuation of knowledge assets, or other types of the so-called intangible assets?**
67. GT – Actually, we had that discussion fairly recently; a discussion on this sort of thing. I haven't been part of these discussions so I don't know what exactly is happening.
68. **GS – So it's actually something that the bank is looking towards. What is the value that you see in valuing knowledge assets, regarding an IT project?**
69. GT – Yes, particularly in any IT project, there's always one or two individuals that have delayed the project; you can take a huge hit; and it's difficult to back one person's ability, and it can add weeks or months to a project. I've never had one that has completely killed the project, but I've had to put back timescales, but generally, in the banking sector with the technologies we use, we're generally trying to get people and we're willing to pay quite a bit of money to fill that gap. Generally it's on a six-month contract basis.
70. **GS – Right. How are we for time?**
71. IH – We're probably get kicked-out of this room soon.
72. **GS – Right. There's one last question I wanted to ask: What is your opinion about account aggregation? Do you think it's something that's going to fly?**
73. GT – Account aggregation...I hate it! {laugh} My opinion about account aggregation – I remember when IT security guys asked me about it, I told them that for Corporate Banking moving IT to aggregate in a proper and official way, which is using the SWIFT network and S940 message format peer through specific agreement between yourself, the customer and another bank, you can get information through the SWIFT network; that's the way we are going to do multi-banking within Corporate Banking; now the way that Egg do it in the retail world, is by abusing the terms and conditions of other Internet Banking sites and sweeping information; we're totally against that.



74. **GS – Do you think that this [account aggregation] is something that's going forward?**
75. GT – Well, I think what probably will kill it, is that banks will put-in ways of stopping it; for instance, when we will first be going into the Internet for Corporate Banking, we're going to be using IC secure ID and .... so, it's not going to be an issue for Corporate Banking, but for Retail Banking, if in the future we want to add more powerful services to the Internet offerings, we'll start introducing Smart Cards and Public Key Infrastructure (PKI); that's going to kill aggregation. They're moving into PKI in corporate systems now; maybe 4-5 years down the line, we may start giving Smart Cards to retail customers with digital identities. I think aggregation is going to peak and then it's going to be killed by security procedures; so I wouldn't bet any money on account aggregation.
76. **GS – OK. There are lots of questions more that I wanted to ask, and I was wondering maybe whether we could have a chance for a follow up.**
77. GT -. ...maybe if you want to come back sometime. I'll drop you an email then, have a look in my diary and let you know.
78. **GS – One last thing; is there any type of documentation around on Internet projects and so on that you can share?**
79. GT – It's difficult, because all of it is confidential;
80. IH – Is your PhD going to be confidential, or will it be available for us to access?
81. **GS – Absolutely. I guarantee that no names will be mentioned. At the end of the day, we even avoid naming organisations. There is no way that your names are going to appear. Besides, once I transcribe this, I'll send you both a copy and you can amend what is possibly misinterpreted. In any case, your name will remain secret. I guarantee confidentiality. And if there is a case for providing me documentation on the basis of an NDA, I'd be happy to sign it.**
82. GT – I'll think about it. If you would let me know of the type of information you want and you drop me a line, I can see whether I can give you this sort of information; because there is a lot of documentation around project management, requirements, implementation plans, all that sort of thing, but it is all specifically marked 'Private & Confidential'; we've got major outsourcing partners like IBM and Xansa, that we don't even read some of these documents to them, because some of the IT decisions ..... whereas as a bank, we're looking for the best deal for a bank, rather than particularly a single vendor; but IBM provides some of the products, particularly the mainframe and some of the Web Sphere products used by the bank.
83. **GS – Right. Thanks very much to both of you for your time.**

#### 4.2. Interview, 19/06/2003

1. GT - ...is for institutions that do that particular activity; there's the kind of market leaders, and then the other ones are a kind of "me too's". And always the thing that we would wrestle with was whether we should be trying to trail-go in something and go through all the pain, or whether you are a fast follower or a "me too". In things like Internet Banking, I think, nowadays, if you are taking on a customer, brand new, there's probably a bare minimum of things that you would expect your bank to stack up to; in terms of, you know, the base product you'd have to have a Switch card, you'd have to have some auto-tellers, you'd have to use other people's auto-tellers, you'd have to have a call centre; and Internet Banking is like so that the other bits are the sticky content if you like that you've got to have to service the customer; to cater for all the different types of customers who interact with the bank.
2. **GS – The case for example with pure plays, like Egg, is that one of the things that comes out quite strongly is that if you are a customer of such a bank, then you're not very well placed in walking into a branch and say, you know, 'my card doesn't work, give me some cash anyway'. There is a contention there that maybe such players like IF, if you like, are looking into market niches for savings or for particular kinds of products and they don't do a current account because – as I've been told – a current account is an expensive thing to run.**
3. GT – Yes, it's probably...you can get into the low risk of products, whereby if your systems are unavailable, it would inconvenience the customer; it wouldn't stop them completely to do something with their banking; there is the traditional banking model where you have all the bases covered; in the worst case, you can walk into a branch and sign across some money over the counter, but as the reliability of systems is ever increasing, we're always striving for the magical 100% availability; and from our own point of view, in our corporate systems, the last 6 months we've achieved something like 99.6% availability in our IT systems; and once you've achieved getting onto the 100% and maintain that over, the core confidence in your systems and the customers using the systems in that way increases. It's a bit like auto-tellers; it's very rare now that an auto-teller – unless there is no money in the auto-teller, which is just bad management from the bank's point of view, because they should normally monitor the auto-tellers and replenish the cash – generally, they're highly available and it's bringing that across, in making sure that your Internet service is highly available as well; you build the confidence up in the channel for customers; just like the branches all work from 9 to 5, the Internet is open 24hrs a day, and if you want to use it, it's there; it's not "I'm unavailable, come back in a couple of hours".
4. **GS – I think this is quite an issue on the Internet; touching on issues of trust there, you know, people buying into an interface. I guess it works the other way round, meaning that if your systems are not available 99.99% then you have a problem in getting customers to do it, because if by any chance a customer tries to use it and it's not efficient or it's not properly working, or it's delaying very much, then they usually will say "I'm not going to use that"...**
5. GT – It's got to be convenient and fast as well; I mean we've already found in the Internet that, for a web page, if the customer don't get response from an action within 15-20 seconds to the max, they'll kill the application and try to login again. So, you've got to make sure that, particularly when you're scaling to many hundreds of thousands of users, at peak times you can hit that performance. And that takes a major investment to scale out; make sure your applications are scaled

so that you don't get a certain size and then say "well, it's not going to get any bigger". When we built our systems, we always assumed the worst. And that is sometimes a difficult thing, because, in terms of cost, you know, if you thought that you're only going to get 50K customers, then the system won't be as expensive as a {bigger} system. But it is made up for only up to 50K customers and if you're really growing in demand, then you'd have to take it on to a bigger system.

6. **GS – What are the observed peaks in usage, if you know?**

7. GT – I have more experience in terms of corporate customers, and the peaks are typically between 9 and 10 in the morning, and in the afternoon, to release payments between 1.30 and 3.30. That's the corporate profile. For retail customers, it's spread across the whole day and evenings is peak time. Amazingly, even at 10pm people are on the Internet doing their banking. It's a good time for people to do that. Again, it even makes you think about your maintenance schedules because, in the corporate online banking world, generally the systems don't get used throughout the evening and the night, so you can cut the system for essential maintenance; but with retail Internet offerings it's far more difficult because you're getting that usage spread all round the 24hrs cycle.

8. **GS – Are there any other observations that you have?**

9. GT – Yes, I think that what most of the banks have done, is that they've probably done the bare minimum at this moment in time and they've released probably the main functionality that they're prepared to risk on the type of security that they've got around their systems at the moment. And I think, what the next phase is going to be, is stepping up that security to release more functionality; and I think that probably has wider implications for the banking industry, because there can be more complex transactions, more high value transactions, that are still being done internally, by human intervention. And it is something that need to happen in corporate banking by investing in PKI systems in the terms that it allows to release more functionality to customers, and take the heat out from the counters if you like.

10. **GS – I see. Moving back to the appraisal process for these things, there is definitely an impact – as you spoke about in our last meeting – on releasing staff from more mundane processes and so on. So, there is a 'quality of work', if you like, issue. Are in any case the impacts from this visible or measured in any way?**

11. GT – Yes, I mean we do have people working in our team, involved in the business process reengineering teams, that have, you know, gone around the bank, looking for these processes and making sure that the deployment of IT centrally has... and they've gone out and audited over periods of time; they have gone around the whole organisation and, no doubt, with the merger with Halifax it will happen again; if the business starts dropping-off a particular function that was getting done manually, whether that can be further consolidated in terms of staff numbers and re-deployment of staff onto other areas of the bank that are beginning to boom, in terms of application processing or something like that; maybe where they want to sell more products, they have shortage of staff to help us backlog new customers to join the bank.

12. **GS – Tell me, is this something that can be clearly attributed to the new IT system or the use of Internet banking particularly, or the use of specific systems? I mean, what we're touching on, in this discussion is what we call in IT literature 'the productivity paradox', measuring actually the effects of IT.**

13. GT – I mean probably the most visible sign we spoke about last time was that the biggest impact that we've seen in recent years is call centres; that has the biggest



effect. And call centres have been around now for over 7-8 years or something like that; I think they've really broken-in; and you can see now the effect that they had on, for instance, the branch network; the centralisation and all that; and the acceptance of the telephone. I remember initially, trying to encourage the customers who were footfall to the branch, getting them to sign-up for Phoneline, which was our system, if you like, and encouraging them to use the call centre; it was quite difficult. And then it became just a fact of life that, you know, by default, when they opened-up accounts they became Phoneline customers; and then gradually, when they phoned their branch, they were rerouted to the call centre. There was that gradual change; and now, on top of that, we've had Internet banking and it will be interesting to see over the call centre; if that has the same effect on the call centre that the call centre had on the branch.

14. **GS – I see. Was there any case for encouragement for using this kind of facility? I mean, there is the example of one of the Greek banks; what they do is that they charge for a minimum number of transactions over the physical branch; so, they're in a way pushing customers more and more to the alternative channels like the telephone or the Internet.**
15. GT – I mean, there is something we've done, price differentiation. We've always done it in corporate banking in terms of that we've given customers discounts on high-value, same-day payments for doing it electronically over doing it manually through a branch counter; and we generally discount 3-4 pounds on each transaction; because high-value same-day payments were an expensive transaction. I can't think of any examples where pricing... we *have* started to introduce things like Internet-only accounts, you know, where you get higher rates of interest, maybe things like better terms on overdrafts and things like that, because it is a cheaper channel to service. And IF has kind of pioneered that in terms of a standalone entity, but it's also keeping the traditional bank competitive for these younger companies as well. I still felt that in the UK there's still a lack of... customers are not particularly bothered about moving their accounts. It's probably a 15-20% of customers who quick-fly, always looking for the best deals in credit cards. The vast majority are simply quite happy to just swing away with their existing bankers.
16. **GS – So, is there a strong case for cannibalisation in retail? What I was saying is, for example you mentioned Internet-only accounts. If you are quite rate-sensitive and you're banking with BoS, and you can have, you know, an Internet-only account, which gives a higher return, then what I would do is take my money from my standard savings account with BoS and move it to my e-savings account with BoS. Is this visible?**
17. GT – Well, yes there is some of that, but I haven't seen any evidence of any heavy shift towards that, but you probably have to speak to the guys in retail specifically about that; I mean things like IF are hugely successful; it's a part of our organisation now; and they've put on huge customer numbers, whether they've just got the particular part of the market that was particularly price-sensitive, and whether they can keep eating in the traditional bank customer, you would have to look at the segmentation of these customers that they've attracted to find out whether there was a particular type of customer they filled their books with, you know, or whether there is a good way to cross-section of everybody. The other thing the bank has to look at over the longer term is traditionally, all the mature customers that have built up their savings, and have got lots of products with national organisations, whereas younger people, you know, it takes them a few years to build up to that, as they develop their careers and earn more money. If these ones are particularly very price sensitive, in terms of lending products, they get the habit of switching about, so over the longer term in things like banking, they may not end up banking for life with one organisation. And that's why we try to stay



competitive; keep a good range of products and rates... I think retail banking is highly competitive in the UK; If you've seen in the press, here the government feels that there isn't big competition in the SME market; the big four banks in the UK have a stranglehold on. But in retail, you know, any customer, they don't feel they're getting a fair deal. Plenty of people are willing to take their business.

18. **GS – Speaking of higher return products offered through a cheaper channel like the Internet, have you noticed a pattern for what one could call financial re-engineering of some products? I mean new products. Apart from just a higher rate, I am talking about new products that are specific to the Internet channel. Is there a rigorous or very specific process for designing these products? I am talking about actually a feedback from... I mean, you can see in products provided through the Internet, the products themselves promoting the channel. You can also see this channel as the starting point of a feedback loop back to the design of the product itself financially.**
19. **GT – Probably a good example of that is Virgin and Intelligent Finance. Virgin and IF have the same kind of concept in terms of, you know, you can have your savings offset the interest you're paying on your mortgage. Now, with the Virgin one, at a high level, they're trying to achieve the same goal. Fundamentally, what the 2 companies do differently is that with Virgin, it's just one big bucket; and it's difficult for a customer to know which piece is savings, which piece is savings or if you're spending from the mortgage this month or spending from the savings. Whereas the approach they took in IF is far more widely accepted by customers; it's the idea of the jar concept. But you still had the benefit of offsetting your interest between the savings account and the lending products that you had. And it's just a conceptual level like that, in terms of the customer; and even by IF calling them Jars, you know, customers can imagine that in their head, like 'OK, I've got some of this in this jar, some of that in this jar, and the net benefit is that I'm paying 50GBP less on my mortgages. Which in the longer term means that, hopefully, my mortgage is paid 3 years quicker at the end'. And you pay less interest doing that. And I think they've got really a good concept there. It always amazes me that customers will stick by the proven and tested methods that they've got at the moment and they'll pay through their nose to the big 4 banks for their mortgages.**
20. **GS – Other issues about moving banks; what I usually come across, by talking to people from banks, is that usually people will think it's a great risk moving their accounts from one bank to the other; and in some instances the regulations and incumbent banks make it more difficult for that to happen. Is this the case?**
21. **GT – I think there's a couple of things; one of the things that a lot of customers are conscious of, is their credit rating; and they want to know when they apply for a new financial product, get a loan for a car, that they're going to have the best credit rating that they have. And when the credit rating looks for things like how many years have you been with your existing bankers, 'is it more than 3 years?' 'How long have you been in your current address? Is it more than 3 years?' If you have been moving around, the bank is going to feel that you don't have as big a track record. And then you go wondering 'if I go to this financial institution and I say I'm with XYZ Internet bank, is that going to sound as impressive as saying "I bank with Barclays"'? So, maybe there is this perception from a brand point of view. Barclays is a big global player, a big brand; they wouldn't let *any* odd customer bank with them. And I know that's a quite old fashioned way of thinking but it's the way it works and it's the power of the brand; and the other thing, coming back to just the basics, I know from working in branches myself that customers come in and say 'I want to switch accounts because, you know, I didn't agree with that overdraft charge you gave me last month'. I remember one instance when a customer came in 2 days later and said 'I spent all morning trying to sort out standing orders and**

direct debits and it's just too difficult'. I'll just stay. And that's a prime one; because we encourage standing orders and direct debits to make the customers' lives easier. And it does make their lives easy to have their bank do this thing {for them} all month long; but when it comes to moving, there's this perception that there's going to be difficulties in that the companies are going to redirect the direct debit, and the bank is going to bounce my payments, and I'll get a bad credit rating because it will bounce my mortgage. The banks have all been addressing that in terms of trying to agree on a fixed number of days and fixed processes, to make that seamless and easy for the customer; and certainly something that the IF arms picked up on this was that some banks aren't meeting these minimum requirements. I will name no names but they know the ones that are notoriously bad at complying with those requirements; I'm not sure it's government legislation or guidelines, but there is a minimum criterion that they've set out for the transfer of accounts.

22. **GS – This actually raises the issue of accounts inactivity; activity rates, which is actually, from what I understand, what a bank makes money from. What I mean is that if someone is to open a new account, if someone is rate sensitive, with XYZ Internet bank, would it be the case that he or she would prefer to open a new account with this Internet bank and not close their existing accounts? How does this affect the activity rates?**
23. **GT –** Yes, that's always something that is difficult for big banks to keep track of, because, you know, you could be losing customers without knowing you're losing customers. And generally, what the banks will do is that they'll keep track of trends in terms of the net effect of all the balances in all the particular products. And they'll be looking month on month through their marketing plans to keep it in the target. And that's something that HBOS is particularly good at in retail banking; they're so tightly focused; the chap who runs the retail arm of HBOS gets an email every Friday night from all his product managers telling him they're on target, you know; and that they're keeping their balances up. So, they're so wired into it that if a particular product began to lag or balances were dropping off, it would draw attention to it. But within this, you're possibly still going to have the customers who leave but don't 'take it after themselves', as I would call it in terms that they're leaving and still stub the account open. So, the numbers that we think we still got knowing on that product...but if you were to go and audit them, maybe, you know, 50 thousand of them have just moved on and just left the account behind. That's something that all the banks have problems with from time to time. Generally, where I came from originally was, if you close your account, you sometimes got charged a fee for closure, so then, of course, customers get wise and say 'well, I won't actually tell them I closed my account; I'll just stop using it'.
24. **GS – In terms of the existence of all these new pure play banks, have you seen a pattern of this happening after some critical mass occurred?**
25. **GT –** No, I mean...Intelligent Finance and Egg have the advantage of the fact that customers know the big companies that are behind them; so they know HBOS is behind IF. They know there's Prudential behind Egg. They're big strong brands. So, it's probably less difficult for them to attract those customers. But for people like First-e or things like that, they closed down. And that sends a bad signal because there were some fears for customers going on to those banks, they were knowing that they weren't going to have the branch network; if something like that happened, it makes them more conservative to stick to the big brands. But albeit they package themselves somewhat differently and they're offering something innovative.
26. **GS – OK. Is there anything you would like to ask or know {from the briefing paper}? Anything you'd like to add?**

27. GT – No. Obviously I am giving you an honest appraisal of my view; and it's possibly not HBOS' view on life; that's what I've seen working in e-commerce; and statistics may refute some of that. If you were to start analysing what we've talked about, maybe... that's the general perception that I've had on things after 1998-99, coming right through this dot com bubble and then burst.
28. **GS – Well, this is very relevant, the dot com boom and bust; especially the bust. And how this has affected perceptions. I just wanted to say that many many times, statistics is not really a very good guide to things. I mean the essence is in other things rather than statistics. What I am observing is that there is some relation between the e-boom and bust, relating to the investment appraisal issues, and I wanted to take your view on that. For example, in taking the decisions themselves, what would appear to be a very rational and a very clearly justified idea for moving into an IT project back in 99, for example, wouldn't look that sanguine in 2002.**
29. GT – Well, in terms of BoS, we were always very conservative, anyway, in terms of what we did on the Internet. I can't say that we did anything that was particularly {risky}. I mean the main projects I was involved in were about the retail Internet banking offering. I was involved in the Internet payment gateway, which was effectively giving a merchant who had a point of sale capability through their shop, the ability to provide that over the Internet and there wasn't a huge take-up on that system in terms of that retailers, a lot of them were sticking to the traditional... We'd had a number of customers going on to the Net-bank system, which was a kind of a global player who filled that niche and, effectively, what we've done is that we now provide the same for less for our merchants, if they want to do it. We've actually used the system internally quite successfully to sell things like insurance policies online; so we don't have to worry about them; the fulfilment of the money transfer, because the customer can present a debit card online, purchase the insurance policy and get it posted the next day. So it was a good driver for actually some internal use; it's not only the end customers' benefit. It's a merchant customer's benefit with their dial-up, with their customers, through their websites; we benefit internally, because we have then the capability to actually make our own online services sleeker.
30. I think a lot of companies tried to get into it quick in the 1999-2000 with the sort of 'smoking mirrors'; what we call 'smoking mirrors' in terms of, you know, it may not all be automatic, all-singing, all-dancing as you may have thought, in that there was quite a lot going on behind the scenes. But what that is, it's like a taster; because what it is, is that if you get the volumes through your basic system, it then justifies investing to do the strategic version of it. The big thing you're always getting in banks is that whenever you bring-in a new IT system, it's got to be strategic. They don't like doing, you know, where a small company might knock together all their website to try something out. The banks have some much reputation-writing on the availability of their systems, whether it's going to be secure and well-tested; the code has got to be constructed in a particular manner and all be auditable and that sort of thing. It means that anything we did do in the old BoS was generally 2 or 3 Internet activities that were well thought-out before we did them. The 3 we did were the ISP, the Internet banking and the Internet payment gateway, are probably the 3 more significant ones that we did. Our Business Banking colleagues have done things like they've put the application of, say, some of their products online as well. They had sort of 7 key products for Business Banking and they've put *them* online, so that customers can {access them}. And they were quite surprised by the amount of uptake they had; because business customers, you kind of thought that they may want to do more face-to-face transactions with their relationship manager. But as it turned out, there were quite significant numbers of allocations coming through that channel; so there have been some surprising things as well. We've always believed that retail customers would be interested on using this, but when we have



offered that to businesses and corporate customers, there's been surprising uptake as well. That's certainly the next way for us; We've done the retail banking and we're going to go into more complex functionality in business and corporate banking.

31. **GS – So, these applications have turned out to be somehow the ‘testing gateway’ for the more complex like the corporate banking ones.**
32. GT – And the only thing that we benefited from the dot com bust is the availability of skilled resource in the marketplace. They have worked on a lot of big projects and, you know, they've got a lot of skills particularly in Internet banking, a lot of different organisations, a lot of different technologies, all these web technologies that they used for web-auctions and things like that. We benefit, because we can reuse them within a lot of our applications; and it's trail-blazing sort of stuff because it has all been pioneered...things like the Payment Gateway: what drove the Payment Gateway market on the Internet was probably the inappropriate stuff that you would buy on the Internet. But what they did, was that they've put the technology, they were recovering money for online services; you know, \$10 or whatever it was that they were taking-in. The banks were able to take that technology and use it. Proven and tested.
33. **GS – In terms of, again, things that relate to the appraisal of things, as you mentioned last time about IT projects, you said that that there is a whole set of steps-stages that an IT project goes through: IT-Strategy, IT, Finance, the CEO of Corporate Banking, and of different departments and so on. What I am trying to see there is, is this a case of separating the Strategic and the Finance function? Is there a feedback loop between these things?**
34. GT – Normally, what we've tried to have is business-led IT. We do speak to consultants; we have consultants in from time to time; we also see what's happening in the industry ourselves; we have research functions within the bank, which are keeping tabs on our position; and from time to time, when an idea comes along, there's various players within all those camps that will bounce the idea off; so you can get a feel for your project, long before it starts to actually get into all these formal stages; it's fairly well thought out, and then you start ticking off all these players in terms of, you know, is it financially viable, will we make some money from it, what's in it for the customer, what's in it for the bank, what's in it for the bank's shareholders; so that we're getting the best value for money whatever we're doing. The way I see it at this moment in time, it's actually a good time to do IT, because there's so much skills available in the market; it's quite a good time to get all things done. Because during all that dot com boom, there was a lot of really skilled resource getting involved in what we call 'Internet froth projects' {laugh}. Things like banking maybe wasn't that sexy; you know, if you thought of a really cunning way of presenting a balance to a customer doesn't really sound as appealing as "I am going to take this pair of trainers and rotate it 360° over the web, and this guy is going to buy it". But the technologies they've used and learned are really good and useful; and that's where we're benefiting from. Because particularly when the e-commerce team were being built-up, we were taking people from all sorts of companies with really amazing skills. And we're now getting the benefit from that.
35. **GS – So, going back to the Strategic and Finance function issue, what you're saying is that all these are interwoven in a sense.**
36. GT – Yes, in terms of that of the numbers are going to stack up, we were forced with our projects and then come to that stage; but if it ever came to a stage where the business believed in a project but Finance thought that it wasn't commercially viable, we had to have some sort of arbitration to figure out which advice do we



follow. And at that time, we would get in some consultants to analyse things over the strategic direction of the bank; 'should the bank be doing this because if it doesn't do it, it won't be here in 10 years time. And the numbers, OK, they don't add up at this moment in time but we need to do it over the longer term'. So, all these things need to be looked at.

37. **GS – Right. Is there a case for separating the costs and benefits identification from the costs and benefits measurement?**
38. GT – Particularly in a bank, we get a lot of business proposals put in our way every day, and this is what we do as a bank; we get business cases and presentations from people who expect our money to be lent to them. And we almost apply these same rules to internal projects in that we almost look upon it as a customer, you know, 'would we lend this guy our money to do this? Do we think it's going to be viable?' But yes, for the strategic benefit of the bank, I think that we have to be a lot of informed people; we have to outweigh numbers that believe that this is the strategic direction for the bank to override the pure financial case.
39. **GS – The interesting bit there is that banks are investment-based institutions; their expertise is in investment. One of the things I've been looking into is how these expert institutions deal with their own investment on IT, and try to compare that to IT companies which perform the same task. And this is where my question about whether there is a particular treatment of IT projects in a bank, as opposed to an IT project in an IT company; in terms of core competencies and the existing expertise, as well as the case for new expertise.**
40. GT – Yes, that's always a big rider as well, because we always weigh the project on the ability to implement the project. We have project prioritisation boards that will say 'there's always so many projects for the bank to take on at any one time'. And you can keep your key people in, but there's the ability on the business side, for the business to handle all these new systems and changes; and you don't want to flood the customers with new services day-in day-out. It has got to be managed. So, that's always to be taken into account as well. But one thing with the dot com boom is that the banks' traditional core competences on IT and the mainframe Cobol kicks and all this kind of technologies; the banks didn't traditionally sit with this kind of stuff; things that were at the edge of e-commerce. And that's something that we've addressed over the last 3 years in terms of getting that capability into the banks as well. A clear evidence of that is these great systems like IF; things like Halifax online, our own bank with the Net Banking system, the project that I'm working on just now.
41. **GS – Was it mainly expertise that was brought in? Or was it the kind that developed gradually?**
42. GT – Traditionally, in Edinburgh, there was a big contracting market; so there was a lot of contract help brought-in to help achieve our projects; because particularly when you've got a big project, if you internally resource and you don't have another big project at the back of that, you can have a lot of staff sitting on their thumbs; you get the pattern right and you may keep 40% full-time staff to take you over with the long journey, but you fill the 60% with contracted help to get through the big projects. Now, that was the old BoS model that we've had. Then we've had the Halifax merger, and they were very in-sourced; and I think it's probably a halfway medium in between, in terms of keeping and encouraging your own staff and skills and getting-in specialist skills. Sometimes it just may be someone you just need for a couple of months to do a particular task. That task will never crop-up again unless you did the system all over again; and that's where contracted skills can help.

43. **GS – This brings me actually to the issues of Knowledge Management, the codification of knowledge and so on. If you are, for example, outsourcing something – like the 2-months project that you said – there is some knowledge developed out of that; and that knowledge developed relating to the configuration of the bank's internal system. Even of this task will never crop-up again, isn't there a case for codifying this knowledge within the bank?**
44. GT – Yes; there is always knowledge transfer attempted; whenever there's a new system going in place, generally, it's handed over from the development team to teams that then run the product throughout its life; and they need to know enough about the system to support it. And the bank, traditionally, has relied on big players like IBM, BT, Xansa, who have got big resource pools that they can call on a particular expert; and they've got some skin in the game, because they have the outsourced contracts with their organisation... there's a near interest as well to source some within their organisation. And we've seen that working with IBM; when we've had difficulties, they've brought people across from the States, from the labs; you know, sometimes the guys who invented the code themselves. And that's the kind of claim that you're getting when you're being attached to these big companies.
45. **GS – Is this something that's being transferred through simple documentation, or...**
46. GT – It is a combination of... it's funny, because I had a meeting this morning about it; from our own point of view, to take on the support for our own system that we're developing in Belfast; we're going to start dropping people into that team now, to actually involve through the code-building, so that, when they come back to support the system here, they'll have been actually involved to its creation. We didn't have anyone involved in the project; and they'll bring back the knowledge to spare to the rest of the team. And we're trying not to put everything on the shoulders of one individual; that is a recipe for disaster as well.
47. **GS – More things about the investment appraisal; not just the financial but also the strategic and all these things, like codification of knowledge etc.: Regarding IT implementation and specifically the Internet banking project implementation, is there a case in the bank for a continuous appraisal process throughout the implementation, and a post-implementation appraisal? How these results from each stage are feeding back to each other, and at the end of the day, how the knowledge from all this implementation is being codified and used.**
48. GT – What we do at the bank, is that we always do a post-implementation review of the project; particularly when it's run over budget to find out why. And in the longer term, what we've got is that normally we'll have a fairly senior person appointed with the realisation of benefits. So, it's not just like you do the project, and then it's running, and no one is paying much attention to it. There will be someone to be asked on the realisation of benefits. So that we know that the money that we thought that we're going to make through it, or the benefits in terms of staff we would have wasted on call centres or the counters, all that is realised. It's funny, because a good example we've had in the bank is our business banking division that went online; 18 months later they reckoned that they'll need a call centre to support just the activity that's going on. The amount of servicing that they're doing from the Internet now, they took it away from the equivalent of a call centre. So, that's quite a good measure; we really can look at it and say: how many payments are these guys doing each month? Say 100K payments. If we were to do that over a call centre, how many agents would it take to do that? And you

calculate the saving; through the call centre, you're talking about employing maybe 100 staff on the payroll for 40 years and pensions and all that sort of thing. That's the kind of way that we measure the benefit.

49. **GS – In terms of a call centre for supporting the Internet activities, what's the observation there? I remember in our last chat, we were talking about moving the activity from the telephone-based operations to the Internet-based operations, for more mundane things. However, one thing that I guess everybody finds is that you definitely need call centre capacity to support the Internet banking operation.**
50. GT – The way that we support Internet banking operations is through our existing call centre. Typically, what we found is that the only time customers needed to phone for support was when they locked their password out. So we give all the call centre agents the ability to reset passwords on the Internet, and that was the vast majority of the calls. If they can't dial-in to the Internet, that's not our problem. It's the ISP's problem. If they've got a standard browser, that's the bare minimum that we need to run the service, so the service that works for one customer, works for all customers generally. So, that has made everything a lot easier.
51. **GS – So there was an issue of retraining {call centre staff}?**
52. GT – Yes, it was fairly simple; we'd had a fairly complex helpdesk, which was our HOBS helpdesk because it was very proprietary, what we were doing involved a lot of software to support some modems, and the staff had become quite technical through supporting that; but it's not scaleable without also making that team bigger. Going to the Internet, has made it a lot simpler. And the kind of highly technical staff that we needed to support those kinds of services aren't required for the Internet.
53. **GS – In general, I'd like to speak about ways and methods for giving value to intangibles; and when I am talking about value, I'm not talking specifically about monetary value; what I am asking there is, is there a case for simply turning intangible benefits into financial measures? Is this a line that the bank is following?**
54. GT – It's almost something that we've been trying to do with our IT departments; it's almost ranking the IT systems they're supporting by the strategic value to the bank in terms of... you know, it's all just boxes to them but if this box falls over, then it's costing the bank 1000GBP every minute it is down. The other box is going to cost the bank 100K GBP for every minute it's down. I suppose through that sort of appraisal, that you could say whatever product is on the end of that is the... it's difficult to get it; I know where you're getting at but...
55. **GS – I mean the example that you brought about the box costing the bank 100K a minute of downtime, if the function that is carried out by this box is such that has many dependant boxes in turn...**
56. GT – Yes, say it's the hardware in the bank's mainframe; in that mainframe, everything else is connected around the edge, so it's the most important thing. Putting a value on that, you know, it could be the value of the whole company; the bank itself. If the mainframe was to go – which cannot really happen – and, say, it never ever came back... The banks, apart from the insurance requirements they have that they have to have 3 data centres anyway; have everything duplicated and multiplexed all over the country; and we've got currently 4 at the moment, Copley, Pudsey and Halifax, and we've got BoS and we have a mirror over in the Royal Bank's building; that's the way that we've addressed it so that there are no single points of failure.



57. **GS – Again, in terms of putting a value on something that is less pertinent than, say, the bank's mainframe, like for example things that are related to Internet banking operations and the interface to the customers themselves; is this something that the bank puts values on?**
58. GT – We put values in terms of how much revenue we get from this particular function. For instance, there was a function that we've put on the first Internet banking offering that we got; say that this cost a number of thousands of pounds to develop; and what we found through looking at it, was that this particular function hasn't actually been that popular. So to port it on to the new system, is going to cost development money again; and if we're not making any money from it, since it hasn't been particularly popular, we decided to drop out that function. And we've picked it up through a different, more strategic way of servicing that particular product. So, there's always been some sort of appraisal in terms of what was the tangible benefit from that particular aspect of Internet banking. And obviously that didn't have the high value.
59. **GS – One of the things with Internet banking is that benefits and costs are, in a sense, spread across the whole organisation; like things you've said about call centres or operating the system itself, how much it costs, how much downtime costs, and so on. Is there a case for measuring all the costs and benefits – across the organisation – that can be attributed to the specific provision of this service (i.e. Internet banking)?**
60. GT – Before the project even happened, we had to put together a business case; and it was as wide as the people making the business case could think in terms of, you know, they brought consultants in and thought, well, the net benefit of this after 3 years should be X GBP against it, in terms of where they thought the savings would come from in terms of the organisation. There is the value of putting the system in, but then it grows beyond this value over the longer term, because it then becomes part of the minimum requirements of being a bank; it's a 'must have'.
61. **GS – But isn't this valuation kind of lost in the history of the bank?**
62. GT – Well not in terms of... as we've spoken about earlier, we have a senior person responsible for the benefits realisation; so, if they said that the payback, for instance is, say, 5 years, then beyond the 5 years we'll start making money, then that person will be asked to revise all the benefits. Paying the project back and then revising the benefits could be that, you know, when business banking have proposed that, they've looked at it and said 'right; if we continue doing this in the call centre, how much bigger would the call centre have to be?' And they said 'well, it's probably going to be 100 staff'. And it is quite difficult, because it's all subjective and there have been numerous attempts to do that from all different sorts of angles.
63. **GS – So, the idea is that there *is* value in doing that; and therefore the bank considers it a valuable exercise in that sense. In terms of taking decisions on how they're going to run the system more efficiently and so on. There is a list of specific bullet points that I have here about the approach to assigning value to intangibles; things like measuring customer satisfaction, or trust; or more tangible things like error minimisation. There is the case, for example, for committing large sums through a branch or the Internet: if a customer is for example making an entry error during an Internet transaction, is this a case for measuring that as removing the liability from what would happen, for example, if the bank's clerk did that?**



64. GT – Yes, I mean, obviously the bank would bear the cost if the money was unrecoverable; say, a transaction that is put through to an overseas bank, that would be unrecoverable and the bank would be liable; whereas the model on the Internet is that we guarantee that the transaction is safe and no one is going to tamper with it. But if the user, the customer, types-in 1000GBP when they mean 100GBP, the bank would make great efforts to assist the customer in recovering this money. I can't think of such cases...
65. **GS – This leads to my next question; is there sufficient volume for something like this to be measured as a benefit?**
66. GT – It's a genuine error thing; what we have benefit from through going onto the Internet is that a number of clerk errors has been eradicated altogether, because there was always a percentage of clerk errors, just as any bank had, in terms of processing. Hundreds of transactions are coming over counters. When you're relying on lifting information from a piece of paper to a computer system, and you're doing that over and over again, there's more chance of it going wrong; because the retail customers, all they're doing is making one bill a day; that's the only one transaction they're going to make. They're generally more careful, and we always confirm with the customer on screen exactly what they're about to do. So, they've got the input, they're checking with the input the confirmation back to say 'Do you really want to send 20GBP to this person?' There are safeguards built-in. We've even taken things out like, you know, if customers keep hitting the return key so that they can speed ahead of the system, we've even put in breaks there to stop them doing that, so that they have to see everything that's going on before they proceed.
67. **GS – So, that's embedded in the design, in a sense. That's an interesting observation. Something that just came in mind I'm going actually back to branches and things like – I don't know if it occurred to you or, in any case, to any of your colleagues – rationalisation of layout in the branch. There has been some slight effect that you mentioned in cases where levels of staffing in some branches were altered.**
68. GT – I think, the biggest one was that it became less of a service centre and more of a retail centre, in terms of adding value to the customer by the staff being more knowledgeable to savings products, mortgages, and specialising on, not just the mundane servicing of processing cheques. That has all changed, and a lot of the staff was retrained from tellers to sellers; and that was quite successful for a number of them. For some of them it has just been a culture shock, and they predominantly took jobs to service centres where those activities were centralised; they preferred to stick with this kind of tasks, rather than becoming sellers. So, I think there were homes for everyone in terms of that the tellers benefited because they were re-skilled and became effectively sales people.
69. **GS – So, have you noticed any change in the actual layout of branches?**
70. GT – Yes, the branches became more modern; they don't have the big dark oak teller; they became more friendly, more like the other shops in the high street if you like; more retail-oriented. You can walk up the street here below our own building and you walk past MFI, and then you come to the BoS branch. It's all a nice modern building; nice colours and posters and things like that, and it's sales-oriented and the staff is skilled-up in adding the value; whereas I remember when I first started working in branches, people would come and ask for a mortgage, they might only be one person at the branch that were able to help that customer with their inquiry. Now, when you go in, they're all able to help you with an inquiry; so, in terms of the bank doing business, there's more people who can sell more complicated products. It has benefited us that way I think. And you can look at the

way that all the banks have followed that stream, some more successfully than others and you can see that this affected the profitability of banks over the last 10 years. BoS particularly is punching above its weight and became a huge organisation in the past 10 years. And it was through the way they embraced that culture change from telling to selling.

71. **GS – There are these other intangible things I was referring to, like measuring customer satisfaction. Is it something that is done in terms of the overall satisfaction, or is there specific focus of the bank to satisfaction from the Internet channel itself, or from the branches? Is there a case for segmenting these?**
72. GT – Well, I suppose for all that we're talking about today, you're only talking to me as one person from the 50K staff {of HBOS} and I'm giving you my personal view. What you'll find with a lot of these things like customer satisfaction is that there will be dedicated areas and functions around the bank that are constantly monitoring these things and have far more in-depth knowledge, and actually making sure that satisfaction is derived from all products. And it all comes down to... particularly what we do in Corporate Banking online is that we constantly monitor the system availability and performance and customer feedback; and we were on a customer satisfaction survey at the end of last year, and we got some feedback from customers, some of which we already knew, but some of which was quite surprising and we've taken action to try and address those issues; you know, you don't want to become too remote from your customer, and there's a risk when you go to the Internet, that you become remote from them. You have to maintain the contact with them and if things are working for them, then you take that onboard. Something that we do with corporate customers is that we bring them in focus groups just to keep track of the market and what's going on in the market, and particularly what other banks are doing in terms of service; if there are any new products coming or any particular things that we think we should think about.
73. **GS – Before I continue, am I occupying you from something else?**
74. GT - No, it's alright if we go on for a few minutes.
75. **GS – Right. In terms of the investment appraisal methods themselves, you mentioned last time things like IRR, NPV and so on. I don't know if you came across it; there are in the literature a number of methods for specifically appraising IT; a host of such methods. Is there any research in the bank directed towards seeing whether it would be valuable in any case to use more IT-specific methods for IT-specific investment appraisal? Is there a research area in the bank that is doing that?**
76. GT – We're a big organisation, so all the standard functions that you find in big organisations are existing. And they're all there to assist the businesses make decisions. You know, things like the innovation area, which have a look at cutting edge technologies and assess them. They take their findings from people like Gardner, people like that and they'll give recommendations to the business. There are times that we're saying 'this technology is really cutting edge but it's too immature. We should wait 18 months to see what happens'. So, they assist in terms of advising on technology decision and direction as with IT Strategy. In terms of financial models for IT, we've tried to standardise it, across all the IT projects, only on whether it's more a traditional finance appraisal or whether it is a particular account of any investment on IT.
77. **GS – There are particular methods like Real Options Valuation, using options pricing Black-Scholes models for assigning values to strategic options and so on. Is this something that you're looking at?**

78. GT – It's possibly something that's done very centrally at senior level, and maybe I just don't have any sight of that. A lot of what we spoke about today is probably like speaking to 50 different people around our organisation; so what I've tried to do is speak broadly from my experience in an organisation that I am working for 14 years.
79. **GS – Yes, I know you can't just know everything! I noticed that you're in Knowledge Management. One issue that crops up is the valuation of Knowledge Assets and how these are being used. There are cases, at least I've seen in companies like Scandia who worked on Knowledge Management. There are issues on Knowledge Assets Accounting; is this again something that you're looking into? Or is it a more informal thing? It comes down to reporting actually knowledge value.**
80. GT – There are members of the team who are more into that. It's a whole huge function, Knowledge Management on behalf of Corporate Banking and there's all sorts of... I'm at the e-commerce side of the team and I know my little world, but the rest of KM, they carry loads of different functions for the business in terms of gathering knowledge, dispersing knowledge.
81. **GS – In terms of your expertise in e-commerce – and that's actually the side I'm interested in regarding KM – I'm not looking into KM from the whole organisation's perspective; I'm looking into, for example, things that you can actually attribute to Internet banking related to KM and how this can be used in appraising or assessing, if you like, Internet banking.**
82. GT – We have built-up knowledge of the way that we assess things and where this is coming handy is where traditional bankers within the organisation have come to us with e-commerce ideas that customers have come to them with, and asked us for an appraisal of this on the basis that, 'if we were doing this for the bank, what would you think?' So, we have used our knowledge, if you like, and experience to assess and assist with other e-commerce initiatives. {pause}. Trying to think of any other examples. I mean, a lot of the templates and things that we make for a lot of our financial decisions are all stored and saved and you can look at previous business cases.
83. **GS – So, it's more about data management.**
84. GT – Yes; it's keeping track of the important data; controlling them and having them widely available to the right staff. The access to the right pieces of knowledge; they don't get dispersed to everyone.
85. **GS – In terms of KM and its role in investment appraisal and reporting; I'm talking about financial reporting and the case for Knowledge Assets Accounting – again this is a way of reporting, feeding new information to the stockmarkets. Is that something that you see as a valuable disclosure?**
86. GT – I think what a lot of the banks don't like to do is... it's sometimes very difficult to track the financial worth of a particular thing, because there's things that happen on the periphery and they might be quite expensive things. But you have to have them anyway; because you're a bank. And it's whether - about that particular thing that you've got – you say 'well, can we actually say we're making X million of pounds profit from this, when if we widen out and say, well, we couldn't do without this and this and this, they suddenly say 'oh, it's costing us a 100m GBP!'. And there would be, I suppose, agreeing in the industry some like for like way that you could compare if all the banks say, 'well, we've all got Internet banking systems and we're going to disclose how much we made from that', then they all use the

same rules to put a financial worth on that. The banks are always very cagey about letting any information about that out; obviously it's reported back through the accounts in terms of the overall bank's profits, and roughly how it was derived through all the silos in terms of Corporate Banking, Business Banking, Retail Banking; and obviously you have all the salary costs in terms of running these operations and building costs, and IT costs... But actually segregating down... you may have derived a 300m pounds profit from a particular area and you did that using 100 products. Whether you then start disclosing from down to micro-level, you know, the profit is derived from each of these products...

87. **GS – I guess that what you're saying is that this reaches the limits of sensitive information, or not necessarily beneficial information.**
88. GT – Well, it's not whether it's beneficial or not; you set a strategy and the profit you want to derive from the business at the beginning of the year, and you strive to do that making the best use of your resources and the products you've got available to you; and some products will be more expensive than other products. But the resource that you need to run all the products is the same individuals or something; it's just that they work more with the one product than the other but, if this product takes a lot of help, you wouldn't have this product either, because they would be sitting about and do nothing for most of the time. It's how you would agree to portion all that out.
89. **GS – What comes in mind actually, is things like Internet security and so on; I would see as somehow beneficial to report that e.g. 'we spent this amount of money on security, and we're giving good results in security', which is a positive signal. So it's about talking seriously about security in being a bank; it improves your profile and so on.**
90. GT – It's difficult, because you can still really surprise other banks who will either say 'oh, we don't spend enough and we're getting away with it, so we've derived some financial benefit there. That bank is too paranoid!' or other banks would say 'obviously, they don't spend enough, because our bank is going to invest 10 times that money in security...
91. **GS – So, it's a bit like starting a war...**
92. GT – Yes; things like that can come backfire on you;
93. **GS – Right. I don't want to take up too much of your time; just a couple of things before I leave you: One of the key issues in investment appraisal for IT is the issue of uncertainty, and whether there is specific treatment of uncertainty as opposed to risk; I don't know if this is something that you could comment on.**
94. GT – The one I would say is simple: if you built a website and nobody came... a lot of these are cutting edge and you don't really know. You've got to have the marketing geared up and in conjunction with the product launch to be effective; something we haven't been very good at in the BoS with our online services is that we didn't match the IT spending and the marketing spending on online systems; which was something that Halifax, I felt, were very good at. And that has been borne out by the number of people they've put on systems like Halifax online and IF; so, backing the product with the market campaign has been very effective.
95. **GS – I see. Well, that's more or less what I wanted to ask you. Thanks for your time. Regarding documentation etc., have you looked into this?**



96. GT – It's all market 'Private and Confidential', so there was nothing I could actually release. Most of it could almost be marked as 'Sensitive' regarding the way that we appraise things.
97. **GS – I appreciate that.**
98. GT – But I'd be very interested on your overall findings from the whole project; if you could share that with us, that would be really interesting to read it. And it's all really valid. I mean, I have a Retail Banking background; I was in Corporate, went to Retail, back to Corporate again. That's why I've got exposure to all this.
99. **GS – Well, yes absolutely. I'm finding lots of interesting things; when you do research and talk to all these people from banks, you're not actually testing any hypothesis; you're not starting from the traditional academic theoretical background and say 'let's test that'. You're just finding your way through things. I'd be happy to disclose my results to you when they come out! Would you recommend that I speak to anyone more specifically about the financial issues? Is there any of your colleagues you would recommend?**
100. GT – It's difficult to get someone. We've got people in the group of Accounting and Finance; I know they have templates for assisting the creation of business cases and things like that for IT projects but I don't know if any of them would be available.
101. **GS – That would be actually spot-on. To discuss – not actually the figures – but the details.**
102. GT – I'll make a couple of inquiries; I'm not promising anything and if someone's available, I will let you know. I'll speak to a couple of guys downstairs and see if they can think of anyone who could be a good candidate to chat with.
103. **GS – I'll check back with you sometime next week. Thanks very much and talk to you soon.**

**5. STANDARD LIFE BANK PLC.**

## 5.1. Interview, 18/11/2002

1. **GS – I hope you had the chance to look at the documents I sent.**
2. AG – Yes, I read through your original e-mail; what your PhD is about, the topics etc. I have now a rough idea.
3. **GS – OK. First of all I'll start by telling you a few things about my background so that you know where I stand; then I'd like you to tell a few things about yourself. I have a number of issues I'd like to discuss rather than having specific questions; it's a semi-structured approach. So, about my background: I'm originally an Electronic Engineer; I specialised in Telecommunication networks; I worked for a couple of years back in Greece. In 1996 I did the MBA in Edinburgh University; Since 1999 I'm doing this PhD, which is broadly about Technology Management. And I'm looking into Internet banking operations; I'm looking to the implementation side. In specific to that, I'm looking into investment appraisal and financial appraisal; the overall appraisal – strategic and so on – that banks go through to promote and implement such projects. The main topics I'd like to discuss with you are, first of all a few very general things about electronic banking and the specific areas of decision-making, investment appraisal and expertise. So, would you like to tell me a few things about your background?**
4. AG – OK. I've been involved in e-commerce development for the last 3 years, effectively when Standard Life Bank launched its online offering. My background is Masters in Business and I actually started in Marketing. I moved into it from a marketing side of things, but quickly moved over to more of the technical aspect. My role, as it stood 2 months ago, is as an e-commerce technical analyst, where my position starts off with concept, providing the rationale for that concept in relation to the strategic direction of the organisation. If there is a driver for that concept, we're taking it forward and it then goes to the 'business case'; and so my role is to provide a business case that supports the development of online functionality. Within this role, there's an e-commerce analyst role as well; so it's similar functionality, where what we do is that we drive through the business requirements for a project within a project team and with our technical colleagues; our IS colleagues. So we have a very close working relationship with the business as a whole, so basically processing of applications; and what we're doing from a technical development point of view is that we form a bridge between understanding technical aspects and the use of technology to enable processes, and the business. So, in the one hand we have strategic drivers for change and we also have business processes that need to be driven for change, and we take that and understand it from a technical point of view, and what technology is available for us to utilise, to enable the delivery of the project.
5. **GS – You said you were working with a group; would you like to tell me a few things about the group layout? What people were involved in it, what kind of backgrounds or expertise was involved?**
6. AG – From a project perspective, the process we go through after the concept has been agreed, the business case has been done and signed off, is that detailed business requirements are then kicked off by our technical people, once the business case has been signed off; a project team is initiated, and within the project there is a project manager; we have people from different areas of the business, so application processing, call handling, obviously depending on what the specific project is. We also have legal audit and compliance; we also have 2 different people involved from a technical aspect, one from the building point of view and another from the implementation and testing point of view; and there will

be a marketing person involved, sales and marketing. And there will be ourselves. So, usually anywhere from 7-8 up to 10 people in any project team.

7. **GS – And these people are drawn from the different relevant departments to the team?**
8. AG – Yes, the business case is signed off by the Executive, by the bank Board. It then goes to the next stage, the scoping stage of detailed business requirements, which from that point moves from being a business-driven case to a technical-driven case; so detailed business requirements come from our IS or IT department. And they set out in specific what this piece of software is going to do. And that then gets distributed to the people who are involved in the project, for sign-off. So, it's all the people involved in the project to sign off what the project is going to deliver.
9. **GS – Right. I noticed that in the overall layout of the project group, you didn't mention anything about people from the Finance side at all. Could you tell me a few things about that?**
10. AG – No. Finance are involved with the business case.
11. **GS – So, they're involved in the stage prior.**
12. AG – Yes, so before we start the project, we do basically a concept outline: a 2-page document that outlines what we're trying to achieve. Now, if that concept fits in within our strategic business plan, we then – my role if I was doing it for myself would be to – prepare a business case. I thought it would be handy for me to hand one to you so that you can have a look at that. {AG hands business case to GS} If you flip at the back in the appendix, we've got laid out there the financials relating to traditional CBA and look at ROI; so that's where Finance get involved. Finance are an integral part of the development of the business case.
13. **GS – Once you've got it down and you've setup the project group, is there at any stage a financial review of how you're getting on?**
14. AG – Yes, one of the key things that take place after the business case is signed off, is that we go to detailed requirements. And when those detailed requirements are signed off, if there's a change request on those requirements, I have to go back and review the cost-benefit. As an example, within this project {AG points to the business case} the total cost here is 523K. When this project started, the cost was 350K, but we had a problem with the implementation of online mortgage tracking, which meant we had to increase the number of resources to resolve the problem and push our delivery date by 4 months. So that impacted on the costs involved, from the main cost being at the technical development point of view and the man-hours actually involved in writing the software.
15. **GS – So, actually the increase by those 300K was caused mainly by the technical side of implementation.**
16. AG – Yes, effectively, what we're delivering on this project is the ability of a Financial Adviser to go online and track the progress of their clients' mortgage application. So, at what stage the application is at; whether it has just started or it's going to complete; what time it's going to complete, stuff like that. For us building the application, the detailed requirements we've come to a cost of about 300K pounds to build the application itself; however, we have to actually implement this application on our group website; the group extranet. Now, that's where the problem is. Because the extranet was built without the knowledge of this, we have



to rebuild how the extranet works in terms of registration, so that people can use our application.

17. **GS – So, it's actually the integration phase that causes the problems.**
18. AG – Yes, which was something that wasn't scoped in the project. We were under the impression that when Standard Life Group have built it, the bank itself is a wholly owned subsidiary, but it acts autonomously. So we have our own e-commerce function here, (investments and health care), and Standard Life Group. So when we went to deliver this, it became very apparent that what they built didn't work. That we had to get them to fix it, which actually involved us doing a lot of the work, because they didn't know how to fix it. So, in terms of the process – you talked about the financials of the project – what we have to do, in the previous page {AG points to the business case} we've got the breakeven point. (There's a summary in here, in the main body of the proposal, and it talks about when it's going to break even). And it was suppose to break even in year 3, but it was bound to break even in year 4, in terms of the cost-benefit of the project. Now, at that point, it had to go back to the Executive to say 'look, this has changed. Are you still happy for this expenditure to go ahead?' By that stage we would practically build our application; So, we were so far down the chain in terms of 'this is what we're going to do', then it became a mute point as to whether you're going to pull it or not. What you could argue was that we hadn't done enough work upfront in terms of understanding the requirements and doing the proper analysis to integrate this application.
19. **GS – Has this been implemented?**
20. AG – It goes in on the 1<sup>st</sup> of February.
21. **GS – Right, I see. What I'm actually trying to ask is related to the fact that there is an issue of the benefits of technology implementation, whereby – arguably – there are mostly long-term benefits. What I wanted to ask you is, in the process of launching it and using it and so on, have you – apart from this problem that you had to solve at the early stages – come up with any other additional costs or even benefits from it?**
22. AG – The costs themselves haven't changed apart from the impact of implementation; benefits have probably increased; we're currently doing a piece of work, understanding customer demand, and 30% of calls come in to our front office and our main mortgage line, where people call and ask what's going on with their applications; financial advisors who phone up ask to find out what has happened with their applications. So, in terms of the cost-benefit, looking at the benefit that we're deriving by implementing this application is the removal of these calls, because it necessitates the IFA to go online to find out what's happening with any application. That volume has increased. As the volume of business we do increases, the more people we have phoning through. So that figure has changed in terms of that the volumes have gone up. But it's hard to quantify. You're answering a telephone call, providing information about an application, which is a couple of minutes. And what we do is that we have to take that time, understand the volume of calls relating to that, and then equate that to man-hours and how much it costs us per man-hour answering those types of enquiries.
23. At no point do we kind of say 'what does it mean in terms of that we could have been taking applications'. So, from my point of view, the cost-benefit we do is very limited. It gives an understanding of how much it's going to cost to deliver it, and the benefit to be derived from doing this piece of work. It doesn't give it in black and white, saying 'do this; it's going to cost you that much and you're going to get *that* benefit'. And this is where you actually move into a very grey area that's called Strategy. What is your strategic approach and how do you quantify delivering a

strategic application, from a cost-benefit point of view. As an example, we spent a bit of time a couple of months ago, looking at delivering online mortgage statements, so that you go online and look at your mortgage statements and your transactions of this mortgage, as well as being able to transact on your account; we allow you to draw to an equity from your mortgage or overpay into it. And the projected cost was over 1m pounds, to do that piece of work, so it didn't happen. But then, to get the cost, the main cost is the development done, so we have to go to our people in IS and say to them 'look, how long is this going to take in terms of man-hours?' and work out how much it will cost. But from their point of view, they have limited resource working on a variety of projects. So they will provide information that suits their requirements at the time. The key thing that we *don't* have is this 'black and white' of how much that will *actually* cost. Which is one of the things if you outsource this work, people will tender to do the work, so you'll know that 'it's going to cost us that much'. But because we're dealing with internal staff, we have to understand what that means.

24. **GS – Right. From past projects, especially the online banking offerings, - and I'm just sticking to that process of implementation review if you like – is there a formal post-implementation review in that respect? And, from what you know, what were – in main lines – the results of the post-implementation review on the online banking operations? Were there, for example, unanticipated costs or benefits there? Would you like to tell me a few things about that?**
25. AG – We delivered a new online banking infrastructure during November last year, where we've redesigned our application. When we did that piece of work, we didn't go through the same processes we do now, in terms of understanding the costs to do it and the benefits. We did however carry out a post-implementation review to understand the impact that it had on customer behaviour and usage of the application. And, obviously, that's continually monitored in terms of number of registered users and the percentage of our business that is self-serving. I think, one of the key things that we highlighted was that one of the things we were not doing is delivering the application as a standalone application. What you're actually doing is that you're trying to drive customer behaviour. So, to understand that aspect, we need to start analysing what functionality they use online and why, what functionality customers want online and why, so that it drives usage. One of the key business drivers for online mortgage tracking isn't necessarily that we're going to get our financial intermediaries to use this application. Yes we will, but we've also got an online mortgage application that we want them to use. So, we're not focusing on a bespoke application, and that's where – if you look at it from a cost-benefit point of view – it's very hard to quantify: 'We're going to deliver *this*'; but that actually means we're going to get a lot more of *these*'
26. So, your benefits are going to be twofold. We do know with our online banking infrastructure that we get about 25% of all our personal savings transactions are done online, and about 1/3 of all the business savings transactions. This year – in terms of value transacted online – it will be approximately 1.1bn pounds. That's' included mortgage applications and savings transactions online; and savings transactions are going to equate to about 600m pounds worth of transactions will be done through our online banking infrastructure. Now, everyone of those transactions would have been a call to our call centre to make the transaction. So, that's where we can quantify in post-implementation, how much it's saving us having all these people transacting online. We've got some very interesting graphs that look at how our volumes have increased and how our phone calls haven't increased at the same rate. And we can go on that premise that these people are transacting online; we've also had a huge increase in registered users for our Internet service. One of the areas where we've not done a great deal of work is looking at dual pricing. So, from a traditional marketing perspective, how can we enter some price differentiation that will drive usage of these applications, where

the financial model has to be a lot more sound in terms of understanding 'if this person transacts online, what does that mean to us as a business?' So 'can we offer them a different savings rate?' So, the majority of our competitors have gone down that route, because they want to encourage people to self-serve.

27. **GS – Right. In terms again of quantification, which is notoriously difficult to do, is there any attempt to quantify somehow what you'd call intangible benefits, or even indirect costs, if you like? Because costs are always tangible. Is there any attempt to do that?**
28. AG – No.
29. **GS – Is that something that you consider it's not possible to do? Or something that you think is not even worth trying to do?**
30. AG – As an organisation, we don't spend enough time looking at the strategic impact; so for every action, there's a reaction. So it's understanding what this action has meant and the implications of it. Quantification...I think there *is* a way to quantify. How we define that, we're not going into any detail. As an example, we've talked about with implementation of our online tracking application will drive up the people applying online. Now that's where, yes, you should get into that sort of quantification. But you need to take that in the context of 'well, what promotional activity have we going on at the time?' Have our rates changed? Has our product range changed? So, there are other tangible factors and other intangible factors that are taking place within the market that you need to look at as well. It's a very buoyant mortgage market at the moment; so things are looking quite rosy, but when things slow down, what happens? At the moment, people aren't very keen on saving money, or they have very little money to save. So our savings function has decreased by default. And these are things that, from an Internet perspective, we need to have a much stronger clarity on our strategic direction.
31. And with that, I mean understanding the long-term objective. The problem with producing a business case is that you'll do that on a bespoke basis. It's a business case for *this* application. Whereas what it *should* be is 'these are our strategic goals; it's our long-term plan for till we get to 2007'. And strategically our corporate goals are this, this and this, that have these cost-benefits. But an overall cost-benefit that is related to the delivery of these different applications, where you understand how you're going to get where you want to. So, we looked at online mortgage statements; over 1m pounds; that was knocked in the head. But what does that mean? Well, if you deliver a mortgage statement online, then you're going to increase usage of other online functions. But we never looked at it like that. It's always that we look at it as an individual {application}. And this is where it becomes very interesting in terms of your strategic direction: what business model are you following; and the bank itself has just moved to the EFQM model. That stands for European Foundation for Quality Management. But, like any model, like MacKinsey's 7-S model, the premise is focusing on different functions within an organisation. And what that should allow us to do is take a longer term perspective to understand that delivering *this* now, means *this* in the future.
32. And then, any changes to that will mean it's not only to the specific application, but also to these other applications. And that's where your e-commerce strategy per se is very important, looking at it in relation to your other channels. Where what you want is a strategic direction for each of them, that is then overlaid by a bank strategy, which pulls together that 'we're going to do this from the e-commerce point of view, that from a phone point of view, that from a mail point of view; these are the developments that are going to take place'. At the moment, e-commerce probably spans to most of them; because the other areas aren't actually thinking about 'we need to do this and that'. The majority of it is business as usual and it's pretty small amounts. And that's one of the ways we're trying to go, is that we

understand the process from a business point of view and drive that through, using technology.

33. **GS – Right. Speaking of intangibles in general, there are things like intangibles which actually turn out to be tangibles in terms of costs and benefits – and I guess that's true for every application. For example, things like rationalisation of systems; once you implement something like online banking, it is obvious what you said about implementation of the mortgage tracker and how this influences your overall system authentication process and so on. Is that something that you're looking at in a solid basis?**
34. AG – I think the more structure you can prepare, the more specific your end results are; so, I think, obviously one of the things you talk about is looking at evaluation and how you evaluate from a financial perspective, tangible and intangible. The more structure you can place around that, the more sound your business case should be as a longer term; and I think that's where – if you're looking at financial intangible or tangible – then it's very relevant that it's in context with your strategic direction.
35. **GS – Right. That answers my question. Going back to the financial appraisal of things, in terms of that, I would like to talk a bit about the role of the Finance function in the overall decision-making process as a whole. I mean, there is a contention – which I find is more and more true as I speak with people from the industry – that it's more an aspect of negotiations and politics, rather than an aspects of arithmetic.**
36. AG – Yes, total politics.
37. **GS - Would you agree to the statement that all the financial methods and the financial appraisal is there to support or refute a business case? Because what they're supposed to be there for is a different aspect.**
38. AG – Yes, it would all come down to the specific business case. In essence, my belief is that Finance shouldn't be involved in the decision-making process. For any organisation to be successful, I believe, what you should have is your business preparing business cases, supported by Finance. Now, the role of Finance is to provide specific criteria to measure tangible *and intangible* benefits as possible, for all these business cases. So, in essence, they're aside from the business. And they can look-in in the business and say 'Right; this is what's going on'. They have to know the whole picture. They don't just get a bit of the picture. And their role is to provide impartial information related with the business case and how that fits into the business. SO, where you'd go is that {AG draws a diagram}... if you've got your decision-making unit, your Board, so you've got your business; the Board, say, set what the strategy should be, the Business fires into the Finance, Finance back into Business, to provide 'well, this is what we're thinking of doing; how much is that going to cost?' and then, basically, that goes into the Board. And their role is to be subjective with regards to the pieces of work that they're doing. Unfortunately, what you will find is, within the Board, there will be a Finance Director, a Marketing Director, an Operations Director, who all have their own agenda and who all drive separate bits from the business. So what you get is that if, say, it's a piece of Operations managers' work, the Operations Director, it will go to him. What you need from Finance is an impartial view, or you need an impartial toolset that the business can use, however you want to work it, where you're not relying to someone else saying how much it's going to cost. What we have, is that we also have this function {AG draws in the diagram}, which is our IT division. Now, at the moment, our IT division isn't part of our business. Basically, people who work for this area, work for Standard Life. They're contracted to Standard Life; they don't work for Standard Life Bank; whereas everybody else in the bank works for SLB.



So we have a conflict of interests with the work that they do for us, because they have again their own personal view, so they have their own agenda, as opposed to be 'what we have is a strategic approach to that we're delivering *this* and this is where it fits in to the overall picture'. Does that make sense?

39. **GS – Yes it makes perfect sense. Actually one of the interesting aspects of financial institutions in general is that because they hold the financial expertise that can be a driver for enforcing the power of that expertise {Finance} onto the different other sets of experts. Is that something that you see?**
40. AG – As an operating unit, they're not overly out there doing that at the moment. But again, they're the gatekeepers, before you go to the Board of Executives. So, you can't do anything before you go to them. But it means people go to them to pull resource, whereas where they should be is in the business; helping the business come up with what's most appropriate, not only from a strategic point of view, but from a financial point of view. Now whether you work that and keep it as a separate function and you give the people in the business a toolkit or a toolset that allows them to understand what the various tangible and intangible aspects of the financials are going to be, that could work. I think, within an organisation, people are sceptical or don't feel they have the confidence to start playing with figures. So, say I put together a business case and I took it to Finance. Then what would happen if all these figures were wrong is that I'll have to do it again like that. So this is where what you need is a sound financial base to say 'well, actually, I know I can go in, come up with a business case, and when someone down the hallway comes up with a business case, he's basing it on exactly the same principles; he's using the same toolkit and then you can compare them. Because you've got a like for like. Whereas, because our business case is still evolving, you couldn't take one that is done tomorrow and compare it to one that was done a year ago, because there is no areas that have any comparison at all, although people would look to do that. So, if you took the same bits to the Executive, then your assumptions based on what has been put forward are going to be different.
41. **GS – Right. Speaking of financial toolkits and so on, how have you seen these change since the dot com boom and bust?**
42. AG – When we first went out there, people would say 'take the money'! And we'd say 'we need to do this and that' and then about 2 years after there was nothing. 'Why are we doing this? It's a waste of money'. And look what has happened. And the problem, even now, is that people don't understand what it is about. Within e-commerce we had a huge issue with this organisation, because our culture is that SLB is a telephone bank. And then it became, well, a telephone bank with an Internet channel, as opposed to being an integrated Internet and telephone bank, where we offer channel choice based on customer demand. And we're still not there. We've still got way to go. What we do have – I mentioned some of the figures – is that our business figures now are fantastic. They stack up very very well. And the great thing in an e-commerce application is that once it's in, it's in. And you make very little changes to it; because if you make changes to it, then it's a huge change. It's going to cost you a lot of money. But our online banking function, we've made minimal textual changes to it over the last year and a half. So, in terms of upkeeping maintenance, it probably cost us 5K pounds for that year and a half! In terms of the business volumes that are transacted through it, you're into that we're not just building something just for next year or for the year after; strategically, we've got to take the long-term approach.
43. What we're trying to achieve; what business volumes do we hope to handle; as an organisation, we know we'll have to handle double or treble the volume of business with the same number of staff as we've got just now; we're all doing overtime, and can barely handle it as it is, and we've got to double or treble the volume. How do

we do it? Well, we have to get people self-serving. It's not an option anymore; we need to do it. So, in a way, this is not anymore a good strategic driver; we have to do it. But we have to do it at the right cost. We've got to monitor that cost and we've got to understand the benefit. But the true cost and the true benefit. Not what we do in a business case, which is 'we think it's going to cost this much, we think we're going to save that much'. What I'm going to do with this {AG points at the mortgage tracker business case} when we've implemented it, is the post-implementation review; look at the volume of people transacting online, the number of calls we've removed relating to enquiries about 'what's happened with my mortgage application?' as well as how this has impacted our online mortgage applications. Have we had more? It's always an intangible, like increasing the use of another function, and that will be a bit grey. You're into one of the worst things, which is making assumptions. But for the majority of things, you've got to make assumptions about what is happening.

44. **GS – You said before that in the dot com boom it was like ‘there’s the money, go and do it’. So, actually, that signifies some kind of change of perception – and of course a change in budget. In terms of the rigour with which the financial tools are applied, what changes have you seen there, if any? What I’m effectively asking is, is that the word comes from higher up that this is not anymore the thing we want to spend money on? Or is it – as with any technology – when you begin, you don’t know how to appraise it.**
45. AG – If you would ask me a few years ago, Georgios, I would have told you that we don't need to do business cases. We'd just do it. 'This is what we're going to do; we do it', which saves a whole lot of time and effort. A decision was made that we want to do something, and we did it. Now, we have to go through the same process as everybody else, which I actually agree with. And we should have done that for everything we've done before. But now we're doing it in context with the rest of the business. As an overall picture, why does what we're doing may be getting more resource in the business than something that somebody else wants to do? And understand that. At that, at the end of the day, is what it boils down to, is within all our projects involve some technical resource; every single bank project. And it's how you allocate that resource. So, it's got to be based on fact; what means the most to the business just now. However, that needs to be taken into context with our long-term strategic view, which is to get us to *here*. If we don't do this now, we're not going to get there, which has implications on everything else that we're doing. So this is where we need our strategic roadmap that says 'by 2007-08 we're going to have delivered X, Y and Z'. We're going to start building X now, we're going to build Y in 2004; and Z in 2006. Ballpark figures on cost-benefits and what they're going to be, an overall strategic cost-benefits, but an impact from a strategic point of view for why we should be doing them and what it means to us as an organisation. Otherwise, you take 'well, let's just look at X; we need to build X. Why? Here's the cost-benefit for doing it as a standalone piece of work'. You're going to miss out one of the benefits, which has to be your long-term direction. I think when you're quantifying the cost-benefit of a business case, it's how do you quantify your strategic approach, and impact of *not* doing a piece of work. So, if you say 'yes, we're going to do this because XYZ', it could be just as valid to say 'we've got to do this, because if we don't, such and such will not happen'.
46. **GS – Yes. That actually brings me to the use of alternative - or different than the traditional – tools for financial appraisal. Is it something that SLB is looking into, as far as you know? I mean, traditional CBA and traditional financial tools like the DCF and everything is what is being used?**
47. AG – Yes, as far as I'm aware, they're not looking into any other method of analysing from a financial perspective the impact of delivering different projects.

48. **GS – Is there nothing related to IT? In the literature, during my desk research, I found a huge number of different methods developed either from academics or consultancies, which are more IT-specific, taking into account some of the characteristics of IT, like the shared nature etc. There are also a host of financial methods – the most well known of them is Real Options Valuation, which is trying to attach values to strategic options; I don't know if you came across this.**
49. AG – No we've never done anything with these. I guess, tools like that are very appropriate but the key thing from our point of view is that we're just a bank. If we were an IT consultancy, then we would be using these tools. And that's why people always wonder 'why do we need these tools?' And that's not what it should be; the reality should be that we need a different toolkit, because we've now increased the scope of things we're looking at. We need to have the knowledge to analyse and understand, at a detailed level, what this means. And that's what we don't do. It's very high level in that sort of work.
50. **GS – Again, a bank, which has all the financial expertise, is best placed to implement something that might be a bit more complex; for example Real Options is something that's based on options pricing and the bank does have expertise to do that. So, is it actually something that is subject to resistance to change?**
51. AG – The reality is probably that nobody has suggested it; or, if they've suggested it, it was 'oh, we'll just do this'. The evaluation part, from a business case point of view is relatively new; we've only been doing it for about a year; we've done other financial... – within our terms of reference as to what the benefit is – we've never spent enough time understanding what we should be using to evaluate projects prior to the commencement of that project, as well as understanding at what points through the lifecycle of a project we need to continually review, and then post-implementation we need to review. And that's something, I think, that people would be very interested in, because what we've got at the moment isn't a true reflection; it gives a ballpark. Ballparks are helpful in making a decision, depending if you're playing in the right ballpark. And the reality is that when push comes to shove, it becomes political; which is what it shouldn't be; the decision should be based on fact; we're doing this because we have *this* information on the financial aspect, as well as strategic impact.
52. **GS – Just to remind you of the time. I have another 5 minutes {laugh}.**
53. AG – By all means if you don't get everything you need today, you've got my email address and I'll get the chance to respond to any questions. And if you need to come back at any point, we can sort something out.
54. **GS – That might be a useful thing to do. New things always crop up and I find that I have to revisit people I spoke to in the past. We've talked a bit about expertise; what I'd like to ask you there is, from your own perspective, in a project like this, an e-banking project, and as banks move along to a new age of banking which is more IT-facilitated, which type of expertise do you see as being more pertinent? Banking, finance, IT, marketing?**
55. AG – The most important people in an organisation should be process owners; people who understand how we do the work. So, what we actually do and why. And where they should be important is – the key thing for me is – bridging the gap between business and technology. Now, the people in technology know about technology and talk all about technology; they talk to each other about technology, but aren't very good at communicating within a business environment. Now, the

people from the business point of view are good at talking about business, but find it hard to cross this bridge into technology, because it's a huge divide. Now, where this should develop, and where I see a great opportunity, is in the middle, where your role isn't financial, isn't marketing, isn't operations; you're pivotal in understanding what the business requirements are and what technology can do to enable those requirements. And the key thing that underpins that is that within the business there will be processes and processes within the business relating to a particular savings application or whatever it is; within this area, you've got technology that can enable that process. How do you do it? What's the most appropriate technology to use? Why? The other thing is that you need people who are visionary in terms of that you need for people to look at where are these processes going to go to enable the business in 2-3 years time. So when you take the technology, you deliver technology in a way that's flexible to enable you to meet these future requirements. Now, nobody can predict where things are going to go; however, you're going to have a very good understanding of the change - from previous changes - that's going to take place in the future. This is where you're into the financials; it may cost you more to enable a more flexible structure - and you talked about shared platforms - and that's where it's imperative. But these people who work here have a system underneath them, a legacy system. You need to uncouple that, and that goes into the middle. So you get technology, the systems and processes, and the business.

56. **GS – Do you think there is some hybrid expertise developing?**
57. AG – Yes. There needs to be. And that's what e-commerce has done. One of the frustrating things for me, when the dot com bust was that everyone said 'you work in e-commerce, so you get to play in the Internet'. But it's not what I do. Actually, I don't go on the Internet at all; What I do is that I facilitate a meeting; I sit in a meeting that involves people from the business and from IT, or I go and have a meeting with the business to understand their requirements, or have a meeting with IT to understand how they can facilitate or enable those requirements. That's they key thing that e-commerce should have been about. But people felt that e-commerce was about the Internet and what the Internet can do in terms of sales and marketing; as a marketing tool. Yes, you're opening up this whole wide world, but if you don't have a process that works, then you're goosed; and that's based on the fundamental business model that is driven by where we're going - strategically and financially.
58. **GS – OK. We probably have to stop here. There were a few things I wanted to ask about KM but this will take time.**
59. AG – By all means, we'll sort something out whenever it suits both of us. If you do think of any specific questions, send me an email. If I can email you back quickly about them, I'm more than happy to do that. Or we can sort out another meeting if that's OK with you.
60. **GS – Sure, that's absolutely fine. Follow up meetings are useful in that you get in between some time to consider things that have been said and can be very fruitful. Before I go, let me ask you: where did your contact came from? Was it Lindsey or Stuart?**
61. AG – All the way through from LM, then onto CD, who went on to NM, who went on to SS, who went on to me {laugh}. It was a long trip!
62. **GS – Right. I just wanted to send a 'thank you' email to the initiator. Now, I'd like to ask you if there's anyone in Finance or IT or anyone in the Group that you would recommend I speak to?**



63. AG – There's possibly someone in Finance that might be happy to have a chat. What I'll do is I'll forward on this email on to a chap called PF and see if he can spare some time to chat with you; because he was involved in business cases, so he knows what processes they go through for analysing and understanding the financial aspects of it. I can do that for you.
64. **GS – Thanks; that would be very useful indeed.**

## 5.2. Interview, 5/03/2003

1. **GS – It has been quite a while since we had our last discussion and I don't know whether you remember more or less what we've been talking about then.**
2. AG – A lot around understanding how we drive e-commerce from a business perspective. We were talking about the financial aspects and what are the most important features, quantifications of costs and benefits and all that.
3. **GS – I went through the transcript and there were just a few things I wanted to clarify regarding especially the project approval process at different stages. First of all I'd like to ask you: last time that we spoke, we were talking about the Mortgage Tracker, and you told me it would go live on the 1<sup>st</sup> of February. How did that go?**
4. AG – It was only slightly delayed; it was off at the 8<sup>th</sup> of February, and it's up and running. We're not heavily promoting it – we only have a small piece in the Observer – but what we've been doing is that we've been running a pilot. Because it was built and delivered for financial intermediaries, which is a very specialist market, what we didn't want to do is go out with a big splash and then they start saying 'we don't like this, it doesn't work, it doesn't fill our requirements' and that sort of thing. So, what I've done is that I've been on the road for the last few weeks meeting key financial intermediaries and talking them through it, and actually showing them their live cases within mortgage tracking; so, getting them registered on our secure extranet to utilise the service. And the feedback so far has been very positive. The next big thing is to go out and promote it across the board. But to achieve that successfully, we really need to get somebody who is going to meet with them and talk to them about it, so then we'll see what happens.
5. **GS – Are you talking about integrating this functionality for providing mortgage statements online for the customers as well?**
6. AG – Effectively we've reached a crossroads with e-commerce; there's a phenomenal number of things on our 'to do list'. And it's understanding what is going to be the most beneficial, both from an organisational point of view and from our intermediaries perspective. As an example, the more time I've been out on the road promoting this, the more requests we get in for, you know "we'd really like this feature"; the biggest one outstanding is probably about secure communication: if you've gone on and seen an application that is in progress, you want to be able to leave a message to find out what is going on, if it's not all self explanatory or if you want to chase something up on a specific point. So, that's what they've been wanting: supposed they go online, they want to communicate online as opposed to having to pick up the phone. But we'll see; there's lots of things we need to sort out; but at that point, we will need to get members of the bank Executive to say "right; this is what we're doing and this is why; because it fits in with our business plan for the next five years".
7. **GS – Right. I was especially interested in the process, especially – if you remember we were talking about this – regarding post-implementation reviews.**
8. AG - The PIR itself was cancelled because implementation went fine. Basically the process that we go through from a business point of view to understand how well the projects worked, is to review the business case initial detailed requirements and then after the implementation – we obviously sit down and have a review but – people have to feed back before that review as to how the project went. So the

feedback from everyone involved in the project was so positive that they decided there was no point having a review, because for the majority of times people have reviews to talk about negative things. So I was a little disappointed that they cancelled the review, but not overly concerned; the key thing from a business point of view is that we've implemented it and it's working; it's working very well and the feedback is going well. There's possibly not been enough exposure of the project to the Executive to understand what it's all about, but that's always the case, as they have other things to worry about.

9. **GS – Yes I understand; is there some kind of a time bottleneck with the PIR? You just said that if things go positively then you don't really do it.**
10. AG – Yes; the meeting should have taken place, but I think the project manager was very pushed for time, so she just said she wasn't going to do it. We're all busy people, so that gave me as well 2 hours free in my day. The problem that we're into is obviously from the business case point of view, and looking at the financial aspect – which is what you're interested in – is that we need to try and understand, we had an expenditure of half a million pounds from a software point of view – well, it was software but it was building it; effectively it's all man-hours. So, it's a notional cost, because we've employed these people and they've got to do work, so it's why are we looking at it in this context? The context you should put to it is "this is our number one business priority in relation to everything else that is happening, so these people need to work on this project". We have employed them already to do this job. So, we're still having a bit of a debate about how you make that crossover from CBA to strategic development. Why do you not look at something as a cost-benefit and you look at it as a strategic driver; because, at the moment, we have a huge wall that says that the cost-benefit for all these projects – which is basically every e-commerce project that we've been talking about – says 'no I don't do it; the ROI is pretty poor'; but then you've got a strategic driver that says 'well, it is the longer term, we're trying to shift our business away from a telephone based operation to use the Internet'. We call ourselves a multi-channel organisation and yet we're not because we don't offer the same functionality online that we do on the phone. And I think that it's an issue that most organisations face, whether it's an e-commerce problem or not, is how you get projects kicked-off. You've got a financial aspect: what is the return from that investment from a cost or man-hours perspective and what the business gets out; and then you've also got 'what does that mean for us as a business in the longer term? Where does it fit into this bigger picture?'
11. **GS – I think we've talked about it before and just wanted to reiterate that: the balance between these things is one of the main issues in decision-making.**
12. AG – A great deal depends on who your eventual line manager is [business sponsor]; so Director sits on the Board that you report to. Previously e-commerce worked under the guise of a Sales and Marketing Director, who was quite pro e-commerce and understood a lot about what we were doing and was very vocal in driving our projects; belatedly we've been working under an Operations Director who has a lot of other projects underway and, from an e-commerce point of view, doesn't have the same grasp on where we're driving the organisation from a multi-channel point of view. So, it is a personality thing as well; it's not about black and white and 'these are the figures'; it's about how well they understand the proposition and what you want to achieve against these other things that *you* feel are important. So, my personal opinion is that we've reached a stage where we should have an e-commerce Director that sits on the Board that drives e-commerce projects, whether it's e-commerce operations or e-commerce sales, whatever it is. As an organisation we've taken a huge step and invested a lot of money and time to put us in the position that we're in now. A third of all our transactions are taking place online, so we've got a huge share of the business. Yet as an organisation,

95% of the resource and manpower are focused on this telephone bit, which is effectively what we are doing, and you've got this tiny 5% who are struggling to go out with what we've got to do these things. So from a financial point of view, you need to redress the operational balance of the organisation as well, to understand how you can drive these projects more effectively.

13. **GS – I noticed you mentioning that it is a personality thing. And that comes to how this affects how the job is done in previous stages: if you have to report to the Sales and Marketing Director, it has also to do with the things that you write in your report. So, I take it that it's different {when reporting to different people}.**
14. AG – Of course it is! From a Sales and Marketing point of view, your focus is on cross-sell, up-sell, let's look at capturing more market share, how we can attract a different demographic segment, so it is focus on the traditional marketing concepts. From an Operational point of view it's all about FTEs, let's talk about how much is the cost of transaction over the Internet against the telephone, let's look at costs involved in the project related to your business case and how it has to weigh-up right. My business case for example was in the first year to remove 20% of calls that we get from intermediaries chasing applications. We know as a fact that 3 out of every 10 calls that we get into this organisation from a mortgage point of view is a financial intermediary phoning up to say 'what do you do with my client's application?' So, the business case has removed 20% of them. It's not a phenomenal amount if you're looking to 3 out of 10 calls; but the long-term objective has to remove all those calls. Now, operationally, let's look at capacity: so if you take 3 out of 10 calls out, your capacity to handle new business rockets. Because we handle some 4000 calls a day, and however many calls that is, if you do the math on that you get a great redundancy. And the work that those people are doing is what we would class as waste-work. They're not doing any work that adds value to the process; we need to understand how we can turn that off. And there are two ways. We process applications more quickly and we also give them a different channel for chasing their applications. Now, IFAs are always going to chase applications; it's the nature of the job. If you're an IFA and your client calls, what we've given them the ability to do is to go and find out in real-time what happened.
15. **GS – Again, just to stick on that issue of reporting geared to expertise of the sponsor of the project; forgive me for being a bit naïve but shouldn't it be the case that in reality you should take account of all these aspects? There are operational ones, sales and marketing ones, financial, IT aspects, whatever.**
16. AG – The example that you want to use is that you have to go back to our traditional sales environment: if you're trying to sell somebody something, then what do you do? If someone is trying to sell me a TV, what am I interested on? Well, customers have a different nominal value, so I like wide screen TVs and my wife wants a plasma TV. If somebody comes in and I am the main buyer, then he will sell me a wide screen TV. If my wife is the main buyer then he'll sell her a plasma TV. It's the same concept when you're trying to sell to a Director; because effectively that's what we're doing; we're trying to sell the concept of what we're trying to promote. And that's where you're back to how well can you sell it strategically or how well can you sell it from a cost-benefit point of view. Now, from a previous case where we were reporting from the Sales and Marketing perspective, it was how much bigger strategic impact it had as well, because Sales and Marketing is more like that; it's not all about black and white. Operations, it's all about black and white. It's talking about bums-on-seats, it's talking about calls, service, abandonment rate, and that's what they do: let's talk about manning costs, how many FTEs have we got less. And now, these are all in a world that says 'this is black and white'. Or you live in a world that says 'this is grey'. Now, eventually,



where we have to get to, is to an organisation where it says 'actually, we're a bit of both'. We've got to have a strategic direction that is very clear and says 'we're going to achieve these tangible benefits from a financial perspective, but we also have to achieve these strategic benefits', because we're trying to attract a different target market; we're trying to drive our business in this direction, which is about having a definable strategy that understands your customer demand and how customer demand will change in time. From an operations point of view, you can't just focus on the numbers, because that is only a part of the main physical aspects of your business; your business is to process, which is a function of operations. Your customer demand is generated from the marketing point of view; they generate the demand to the front end. And we live in a traditional hierarchical structure, and that's possibly where the problem is; we don't live in a continuous improvement environment; we live in a world where we have a team that's called Continuous Improvement who comes in and does it to the people. The people who should be driving any change, are the people in the process.

17. **GS – Yes, I see the point; I am simply trying to find out the balance of reporting. I just wanted to ask you a few other things; regarding decision-making processes and the project setup, you were speaking of the initial stage where you have a 'proof of concept', a 2-page document where you're actually promoting the idea.**
18. AG – Exactly; it's a PIR, a Project Initiation Request we call it, but it is a 2-page summary of what we intend to do.
19. **GS – First of all, does that get signed at the Executive level?**
20. AG – Yes, it does. Basically, all your Project Initiation Requests go up. So, they come from all areas of the organisation, whether that's Training, whatever through to E-Commerce. So they all go to the Exec, and the Executive look at them and, at that point, make a decision as to whether they should go to do a business case.
21. **GS – At the stage of doing the Project Initiation Request, the involvement of people in doing it, is it the same project team that will follow up with the project?**
22. AG – The Project Initiation Request doesn't come from a team; unfortunately it comes from an individual. So, it will be an individual who has an idea that says 'let's do secure online communication for IFAs'. So take the project that I'm trying to kick off as an example. So, if that was the project I wanted to do, I would do a Project Initiation Request, it would go to the Board, they'd have a look at it and go 'yes, that's the sort of thing we need to try and do; great, do a business case'; and you do a business case. Now, depending on who you're going to try and get to sponsor it, at the end of the Project Initiation Request you *should* get a business sponsor – and I stress *should*. Somebody within the Exec should say 'I'm going to sponsor this', or they're trying to get people underneath the Executive level to sponsor projects as well now. So, they're trying to get people to take responsibility and say 'right, I'm going to sponsor this project and work to help you put together a business case that you can sell'.
23. **GS – After that, if you initiate this Project Initiation Request, then you are becoming someway accountable for it.**
24. AG – Well it's the same as writing a business case; for example, I wrote the business case for the online Mortgage Tracking, I did the costings, I did everything in it, and fortunately I was involved in the project all the way through, which is what you need; you need someone who says 'I have responsibility for this; I've said that

this is what we're going to achieve. So, to achieve this we need to do all these things'.

25. **GS – In the business case, you mentioned that you did the whole thing regarding the business case financials; that again comes to the involvement of the Finance team.**
26. AG – The way they work is that you pull the resource on demand – so I did the financial cost-benefit, I did the ROI, and then said to Finance 'could you have a look at that? Check if that makes sense' – 'Yes, that's fine', or 'No, that bit needs redoing' etc. So, the person who owns the business case has to do the thinking about what the return is going to be.
27. **GS – So, there is no direct involvement of people from Finance in the development of the business case.**
28. AG – They *are* involved in every business case, but they are pulled when they're needed. Effectively, what they're doing is that they're divorcing themselves from doing the work, so they get you to do the work and they'll check it.
29. **GS – Alright; that makes sense. Now, on detailed business requirements, which is actually the next stage after the business case; when it comes to change requests, you brought an example of the Mortgage Tracking where there was a change request involving an increase of about 50% on costs. That went back to Finance and the business case was redone. My question is – it did go to the Executive obviously as it involved a 50% increase in cost – does it always go to the Executive when there is a change request?**
30. AG – No, it depends on the scale and impact on the project. Basically in the Mortgage Tracking project, the timescales doubles because of an issue we encountered implementing on our intermediary extranet. And what that meant was that because our timescales were doubles, all costs were based on man-hours, so effectively all our technical team costs doubled. And at that point the cost-benefits have changed, so the Executive members who signed off the original business case need to revisit and amend the business case. You've entered realms of 'is there any point?' You're halfway through a project, you spent a lot of money already, are you going to bin it? Well, if costs had trebled, or quadrupled then yes. You will bin it. If your costs are doubled, it is a judgement call; for any other change request you'd weigh up how big that change is and how big the impact is and a meeting takes place for each change request with the sponsor the project manager, the business owner, which is me, and IS or our technical team project manager; so a meeting takes place with these four people to talk about 'look, this is a problem. Sponsor, what do you want to do about it? Do you want us to revisit the business case? Are you happy that timescales are going to slip by a week?' – 'Fine, no problem.' And it's the responsibility of the sponsor to communicate that to everybody else who is signed off or whatever.
31. **GS – So, doesn't that trigger some kind of more thorough review of the whole thing?**
32. AG – In any project lifecycle you get a number of change requests. From things like textual changes, to layout and design changes. I'd say 90-95% of all change requests that will happen in all projects are going to be straightforward. The impact to the project is minimal – maybe an extra day, it may even save us time. If there is a huge change request, then that's where you start saying 'well, there's a change to the requirements'. Obviously we go through detailed business requirements schedule; we go through what is effectively a de-scoping exercise, where we say 'well, we're not going to deliver this with this project' and it becomes very clear

what your deliverables are. Obviously that has been driven by the business case that says 'we're going to do X, Y and Z'. As an example of that, we had in the original requirements that we were going to deliver Online Mortgage Tracking to staff, so that they can use the same functionality to check up on applications. That involved time and resource to build a new security platform for staff to go online and use it. So, what happens is that we say 'well, how will that look like in terms of cost-benefit?' – 'That will add more time and more money'. So that gets de-scoped. What's the return on that investment? Well, it's for staff so unfortunately that's the way it works. Now, if you look at it from a strategic point of view, longer term it doesn't make any sense. You're going to have intermediaries that are going to have a lot more information than people on the phone do. Are they going to be able to see things that people in the call centre can't see? Which is ludicrous! If you think about it on those terms, if you're phoning in and you go 'I'm looking at this application' then you'd expect the person on the phone to say 'ah, I'm just looking at your case'. And see *exactly* the same information;

33. **GS – Right. Post Implementation Reviews; you mentioned something in the previous conversation we had on the way that you did a PIR back on doing the online banking system and now, and you were talking about doing that back then, not in the sense of the cost-benefit side, but only in the sense of seeing how many people are being signed up, new registrations, customer behaviour etc. Do you see any change in that process now?**
34. AG – There has not been a phenomenal amount of change; the problem we're in at the moment is that there's almost a lethargy with regard to how we continually monitor and understand what the returns have been. And speaking as an individual, you just go on and move to different projects. An important point that I've been trying to get across is that people need to have ownership and responsibility; online banking has been implemented, and it's your job not only to understand how that is working, monitor any problems with it, continually develop it, these are things that need to take place but don't. And it is about understanding why that takes place; people will do bits of them but nobody has full accountability and ownership over them.
35. **GS – Is there any kind of PIR template?**
36. AG – They do follow a template, but it's obviously a project management review template; so they review how the project went; it's not about financials; nothing like that is included in a PIR. Again, if you're spending all this time and effort putting together a business case, then what I will be doing from a personal point of view is that I will want to know that it has worked. So I'll go and check it's working. Even this morning I had a meeting with the business analysis team to talk about and understand the statistics; because I need to know who is going to be using it, how long they're using it for and what they're doing with it when they're using it. Are those people calling us? Have they stopped calling us? If I can understand that then I can understand what other impact we may have. An ancillary impact is 'has it driven more applications from these people?' What other benefit are there? So, next time when I am looking at a business case, I will be a lot clearer as to whether we've actually not only got what we call the core benefit of removing these calls for people chasing applications, but because we've driven their behaviour, we've delivered the functionality that they wanted, then they're putting more business with us. Or we're getting more business because they like us better or whatever. You need to understand what the overall impact is.
37. **GS – Right; there was something you mentioned in our previous chat about Mortgage Tracking. You said that when you get IFAs to use the system online, each one of these transactions online is one less phone call to our call centre. Is this true? Where I am getting to, is the perceptions about**

measuring things; for example if we talk about online customers – and let's leave the IFAs for the moment – and you see that you have an increase in online transactions, then there is no exact direct association between the number of transactions online and the number of calls that would be done instead.

38. AG – We know that. People feel a lot more comfortable transacting online than they do over the telephone, so more transactions take place over the Internet than they do on the phone, and that's the reality of it. When you as a user control that interaction and you are comfortable with that interaction, you use it more frequently. Now what does that mean? That possibly means that people who want to do transactions on the phone aren't doing them, which is quite a scary concept. And the converse, I'm sure, if you took another step back to branches, I know there are times when I need to go and do some banking stuff and I just haven't done it, because I have to go and find my branch and go and speak to them; so if that's not going to happen, then I'll have to call them; and if I haven't done that, then I'll go online; that's simple. And the more simple you make it, the more usage you get. We do know that we generate a lot more usage over the Internet from fewer people than we do over the telephone. But from a cost point of view it doesn't make much difference to us at all, because you could use it 2 or 3 times and it's still not costing us a great deal of money for you to use that service, whereas if you called us 2 or 3 times, it would. Now, from a statistical point of view, you have to make a judgement call about how you measure that. Do 3 online usage sessions equal one phone call? Well, you can't make that assumption. You *can* go with 'if they go online and make a transaction, then that is a phone call'. So, even though we've got more transactions from fewer users, we have to correlate this with the telephone, because from a customer's point of view, this is what they wanted to do. Just because if the service wasn't there they might not have done it on the phone, doesn't mean that they didn't want to do the transaction. It's a very tricky association, and I think there's going to have to be some future work done on trying to understand how you correlate them more effectively.
39. **GS –OK. There are two things I wanted to discuss. The one is about going into more detail about quantifying intangibles and I don't really know if you are the right person to speak to about this.**
40. AG – No; it's going to have to be PF. I've contacted him and I haven't had a response from him yet. I don't know if he's in the office or not, but I'll try to speak to him again and let you know how we get on.
41. **GS – I'll leave that to PF then; because it gets to things like activity rates, cannibalisation, security and all these things.**
42. AG – If he's happy to speak with you I don't know whether it is going to be easier for you to send him an email with some questions, I don't know. I'll try to get hold of him and let you know.
43. **GS – Right. Another thing that actually relates to the role of reporting mechanisms in the sense of the accounting practices and standards and so on. There is a contention that, because companies try to maximise shareholder wealth, what you are reporting to the market through financial statements and all that lot – and according to the accounting standards and so on...**
44. AG – As a mutual company that's not something that we worry about; so, we're not listed in the stockmarket; we report to policyholders who own Standard Life as an organisation, is we aren't driven by the stockmarket. It obviously impacts us in



terms of bonuses etc but from a financial reporting point of view, not to the same extent.

45. **GS – Yes. Even at that stage, if we are talking about disclosure of figures or performance of the company, can you say that the way that this disclosure is done affects the way that the appraisal of the projects is done, in the sense that the former defines what is ‘worthwhile’ measuring and therefore, this is what you measure, if you know what I mean.**
46. AG – I don’t know; again that’s more of a question for PF; from a Finance point of view, he’ll have a much better understanding of how it all fits together.
47. **GS – OK. So, let us talk about Knowledge Management. First of all do you see any relation between the usage of the Internet channel and aspects of Knowledge Management? And that comes in two dimensions: First, in terms of the quality of information that you get about customers and how you use that and turn it into knowledge internally; and the other dimension was regarding the completion of Internet projects offering a new area or scope of knowledge. What is your take on that?**
48. AG – Two aspects: obviously we have touched on the one earlier looking at things from a usage perspective. We know for fact that customers transact more online than they do through any other channel. So, we have an opportunity to build a much better and more detailed understanding of you as a user, as a customer of this organisation. How we manage that knowledge and utilise it in the future is still a huge question. Traditionally organisations have been very poor about using existing information they’ve got about customers, let alone new information that is generated. Where Standard Life has an advantage is that it has some 5 million customers in the UK, so a huge percentage of the UK population; now, that information is spread across a variety of different databases and sources. So, knowledge management is going to be focused around how can we best use that resource in a way that allows us to enhance our customer’s experience. I think always focusing on the fact that for the most part, we don’t sell as an organisation; people come to us to buy. So how do we influence that buying behaviour? And that’s about being able to offer the right information to the right people at the right time; and that’s what knowledge management should be about.
49. We are a long way off using any of the information we’ve got to manage relationships effectively. The second part of KM is really from a technical point of view, understanding the technology that can drive it. I know of a number of different software solutions out there that can provide you with a phenomenal amount of detailed personal information. There’s still a lot of scepticism about how you use all that information, and that I think is the big question mark around ‘Yes, you’ve got it, but what do you do with it?’ And it is not necessarily knowledge; that’s the biggest concern, that you may have a phenomenal amount of information, but it is still not knowledge. If you meet somebody on an individual level, you will probably have a much better understanding than seeing it on a piece of paper. Because that doesn’t tell you a great deal about the individual. And that’s where we need to do a lot more work in understanding taking raw data and putting them into a system. As an example, at Standard Life Group, they have an outbound calling team that tries to sell products. And they are trying to sell life assurance; the marketing department have pulled out data, they did propensity scoring, found the people with huge propensity to buy, they started doing their outbound campaign, but had phenomenally low response rate. What they then did was that they were about to do a totally different campaign that was for ISAs. Now, ISAs have a totally different target market.
50. They used the propensity scores they gave them for ISAs to so the life insurance one; and it got much better results! So, you’re into the realm of ‘well, actually we don’t have much of a clue, do we?’ Do we sell to these people? How do we sell to

them? And for the most part, if you understand where the whole concept came from, it came from Marketing, whereas there's this grey area called 'how do we cross-sell and up-sell?' - 'Well, we need to understand the customers'. - 'How to understand the customers?' - 'Well, let's build KM'. - 'And what's KM?' - 'Well, KM is understanding our customers'. Then KM involves statistical data and then manipulating statistical data to say 'go sell to these people', which is fraught with issues; I think from a personal point of view, there is a lot of scope to achieve something. How you achieve that, I don't know. There are a lot of stochastic models out there that you can start to utilise to build these profiles and understand how well it works, change it and so on. But to effectively do that, the length of time that you will going to have to run all those models is pretty big to get results that are going to be meaningful. And then the whole problem is that this is the top end of the wage; the thick end of the wage is all this raw data at the bottom. Now, how do you change and manage that information? Well, with a great deal of difficulty if you've got it over disparate sources.

51. **GS – One of the things with KM is that the very essence of the knowledge – not in terms of the customer, but in terms of experience within projects – resides with individuals. Just as you mentioned before, the example with the propensity figures, there was the result that using the propensity figures for ISAs, you get better results in life insurance. This is knowledge. What I am asking is how is this being kept? Is it documented? Or does it live with people who go around different projects?**
52. AG – Effectively, what happens is that it lives with people, and that's why people are your most invaluable resource. If you look at why people get paid a lot of money to go to a different organisation – especially in financial services – it's about experience. For most people, things aren't written down and documented in a logical format that somebody else can pick up and understand. So, say for example I left this organisation tomorrow; then I take 4 years of e-commerce experience with me. There's nobody within this organisation that employs 12,000 people that has the same knowledge. So, what you're doing from a personal point of view is trying to put yourself into a knowledgeable position so that you're invaluable to the organisation. And that's how recruitment works to a certain extent; you're trying to recruit the knowledge skills that you need, and that comes from experience.
53. **GS – Speaking of that kind of Knowledge Assets, if you like, do you see any value or any way in incorporating knowledge assets into the measurable bit of the organisation? There are some – theoretical at the moment – propositions about Knowledge Assets Valuation (KAV) and Knowledge Accounting. Do you see any value in doing that?**
54. AG – From a people perspective, yes. I think it's very important that an organisation understands its worth from individuals. And that is based on individuals' knowledge. You've got a number of other skills that individuals have, but you now find the majority of people are measured on things that are completely irrelevant. From an organisational point of view, knowledge is part of the key; so, if you want a project to be successful, if for example the Bank of Scotland are going to deliver Online Mortgage Tracking, then how can they be sure that they deliver a successful project? And if they want a successful project that is more successful than this one, they will go to AG and say 'here you go; we know you've got the knowledge, you've delivered this project from a business point of view; it has had this impact, so here you go; you're going to do this'. So your individual worth from a knowledge perspective *needs* to be quantified; how it *is* quantified is obviously the core question, and how would you rate someone's e-commerce experience or someone's operational experience, or someone's marketing experience? What's the balance? What's the payoff? Is there one?

55. **GS – In terms again of reporting, one dimension that you mentioned is that it is useful for the organisation to know what its people are worth to the organisation. In the other dimension which is Knowledge Accounting as a reporting mechanism, do you see it in the future being of some value – as information to be disclosed?**
56. AG – You've got a phenomenal knowledge base already within an organisation. So, how can you keep it, define it, and grow it? I think there *is* going to be value in it; how you convince people that you've got a method that can do that, that is logical and actually - from a business point of view – is tangible. Because you're talking about something that, in reality, is intangible really, and you're trying to make it tangible. As the son of an accountant, I am not very keen on accounting {laugh}. As we were talking about statistical analysis, you can get 10 different people looking at the same bits of information, and they can all come up with a different conclusion. And that's where you have an interpretation that is sound from a business point of view, it helps you grow your business, then you're using the same method across the organisation. And that's where you always encounter problems, because as a hierarchical organisation, you're functionally split, or split in understanding what the demand is and what to do to meet that demand. And that's where I think you will encounter more issues about; well maybe HR thinks this is a great tool. But maybe because HR think it is a great tool, Operations think that it's not worthwhile. We need to come up with our own way of understanding what knowledge our people have; how does someone in Operations know what knowledge I may or may not have; and how does someone in HR knows what is good knowledge in Operations? And that's where it's all parochial. And the traditional hierarchical structure is that you have these management bits doing the management thinking.
57. **GS – OK. I won't take more of your time. One thing I wanted to ask you there, after having 2 discussions, do you feel that there are any areas that I am not looking into and that I should be doing so?**
58. AG – There's almost 2 clear areas that you're looking into; the one is understanding the financial aspects of how an organisation drives business from a new technology perspective; the second one being on understanding KM. I think you're trying to make this leap from the one to the other. It's going to be interesting how they work together. Obviously you're looking at what has to be some form of technical solution to understanding and managing it.
59. **GS – Well, it's less about a technical solution. The core of my propositions are based on key questions which are interpretative in terms of can you, and which bit can you, quantify?**
60. AG – I think there's always going to be qualitative and quantitative. What weight do you put in each one of them is depending on different things; but I would just be interested to see what the output is going to be.
61. **GS – I promise to provide it to you once it is out.**
62. AG – So, how long have you got to go?
63. **GS – About a year. I've interviewed around 30 people mainly in Edinburgh and London. It's more or less from about 10 FIs.**
64. AG – How are you finding their responses? Are they similar or are you finding quite different information from them?

65. **GS – It's similar in many respects, but different in the detail of it. Because one of the things that I am looking at there, is decision making processes and project prioritisation that are all done differently; and you get different perspectives and different concepts, but in the main guidelines, I get some kind of coherent response about ways of measurement and about investment appraisal methodologies. One key thing that you get is that people prefer in general – maybe because it is business as usual, maybe because there is limited resource – to stick to traditional ways of measuring things rather than looking into something new, despite that you may have some promising areas there. And organisations prefer to develop that through, rather than make quantum leaps from one to the other. It's quite interesting. Please read the transcript from our previous chat. If I have in any way misrepresented you, then please feel free to tell me.**



**6. VIRGIN ONE PLC (THE ONE ACCOUNT).**

## 6.1. Telephone Interview, 18/02/2003

1. **GS – First of all, would you mind if I tape-record the conversation?**
2. **SL – No, not at all.**
3. **GS – Let me explain the reason I am recording this; first of all it is for me to get the full information for the discussion. It's also for you to check that everything has been put down properly and none of your words are misinterpreted. What I'm doing usually is that I am transcribing this and sending the transcript to you, in this instance, to have a look and see if any misunderstandings have occurred from what you said and so on.**
4. **SL – Right. I ought to tell you the same; you're on a recorded line here anyway because all of our lines are recorded, so anything that you say is also taken down as evidence as well {laugh}.**
5. **GS – OK. Sure, it's usual practice {laugh}. First of all how much time do you have?**
6. **SL – I probably got maybe an hour and a half at the most.**
7. **GS – That sounds fine; it won't take that much; it usually takes just over an hour. It actually depends on how interesting things get. So, the way I'd like to do it is start from saying very briefly a few things about myself, and then kick off the discussion. I wanted to speak about, first of all, the actual product, the offset banking that you're offering and the overall customer proposition and then move on to the investment appraisal issues and talk about the decision-making there; cost benefit analysis and the issues of quantifying some of the benefits, which may be intangible, for example. So, a few things about my background: I am originally an Electronic Engineer and worked in telecoms for a few years. I did an MBA in Edinburgh University, which was about the deregulation of telecommunications; then I've started this PhD. The main subject is technology management and what I am looking at is specifically the investment appraisal of Internet projects in the banking sector. One of the very interesting things there is that the investment appraisal process for IT and Internet is notoriously difficult to do; there are so many things regarding IT, which – in most cases – come unnoticed if you like. Also, the way that the banking sector, especially in the UK, is developing and is being shaped by IT, has given rise to some propositions, which I would also like to discuss; one of them is the decomposition of the banking model into something which is more similar to the utilities (Production – Distribution – Supply) and the proposition that actually virtually anyone can offer banking services. The other proposition there, relates to the segmentation of the customer base according to Net Worth; that for example, with the prevalence of this channel you may have some kind of, if you like, splitting of the customer base into the more affluent, the mass affluent, the less affluent and so on. So, that's me in a nutshell; would you like to tell me a few things about your own background and if you like comment on what I've just said about the two propositions?**
8. **SL – OK. Probably I can make the comment as we go into a little bit of more detail later. My own background; I started as an Engineer as well actually, a Chemical Engineer and trained as such, and worked in that field for a while; but then I became a teacher; I was teaching secondary school sort of A Levels Science; then about 5 years ago, I moved into work for what was then Virgin Direct, I moved over to work for what was called Virgin One, which is now wholly owned by the Royal**

Bank of Scotland and we've just re-branded as The One Account. I've had a variety of roles since I've been here in these 5 years, ranging from responsibility for training, responsibility for HR – believe it or not – and then recently, about 2 years ago, I've completed a secondment to work for an ICT project for the Government, and since I've been back, I've taken responsibility for Internet Sales. About this, basically, we treat the Internet as a significant sales channel in itself, unlike most mortgage providers; I think it's worth pointing out that our product is... we would class it as a Current Account Mortgage, as opposed to a flexible mortgage or an offset mortgage. It's inherently more complete than offset and flexible mortgages in that – I don't know how much you know about the way that we operate...

9. **GS – Well, I know what information is available on the public domain.**
10. SL – So, you know, you've got what it shows on the website; and essentially the nature of our proposition is that we sell as a mortgage product because that is the main reason why a customer may wish to purchase. People don't, on the whole, change their finances on the back of banking; they change their finances on the back of a mortgage. And, with us, they bring their current account with it has added benefit. It helps contribute to the life of the individuals with us, and it also gives us a more complete package, because essentially if someone runs their One Account, effectively when they come to us, they bring in their savings, their personal loans, possibly part of their credit cards but certainly all of their mortgage and their current banking. So that's one switch, which actually brings several significant propositions. Now, as I say, we lead as a mortgage product, so we market ourselves first and foremost as a mortgage product; having said that, most of our retention tools involve the banking service that we might offer, and obviously a competitive rate. And actually, the rate becomes – you're probably aware of that – a less significant proposition, when it comes to the full current account mortgage, because your savings, your current salary, all are constantly working to offset your overall borrowings. So, what might appear to be a less favourable interest rate compared to some classic fixed rate, soon when you start using the account effectively, you actually work it to your advantage. So, the main retention tools, I guess, coming to from this are the quality of the banking service that we provide, and that is largely over the telephone and over the Internet. Our Internet service proposition is unique to the product and also our ability for the individual to save money and provide some flexibility for them as well. You know, you can borrow back your money at will, up to a pre-agreed limit, you can underpay or overpay at will, provided you stay in accordance with the agreed plan; so, there's a lot of flexibility and flexible mortgages is a good term to use, but it's not sufficient; so we sort of coined the phrase and continue to use the phrase Current Account Mortgage. So, that's sort of where I'm coming from.
11. **GS – Right. From what you said in actually describing the product, would you say that in terms of recruitment of new customers, they come from – if you like – a more sophisticated, both financially and computer-wise, in terms of PC-literacy and so on background?**
12. SL – Yes they do. They definitely come from that sort of background. I would say the Internet marketing is broadening and has been broadening over the last period. The profile of people who are prepared to buy financial services over the Internet has broadened and is continuing to broaden. And we've noticed marked changes over the last year and a half probably, so, as you probably know, the proportion of mortgage sales over the Internet are very small; very few people will buy a mortgage over the Internet – something like less than 5%. Our proposition, at the end of last year, nearly 40% of our applications came over the Internet. So, that's a significant difference. And are they of High Net Worth or do they have a different profile to the call centre customers? They are different, but the differences are

becoming less. As we find, a more and more broader spectrum of people are looking to use the Internet to buy our product.

13. **GS – Right. What would you say were the main concerns in setting this up? In setting both the customer proposition and the IT proposition; I'm talking as well in terms of IT contingencies there.**
14. SL – Security was a major concern. Both of application information but most significantly of service. When we were looking to enter, we weren't the first players to enter and provide online service capacity; and when we did that, I think, we had so much more risk with a Current Account Mortgage; you know, if someone got access to your account details, in some cases you might get instant access to hundreds of thousands of pounds potentially, and certainly tens of thousands in lots of cases. So, security is a major issue for us that we need to and wish to address. And, I suppose, when it came to the Internet, when we were looking at it from the sales perspective, it was more 'Is it worth the effort to invest in this channel?' So, we did something that was fairly straightforward and it just took off with very little effort from us; so we proved to ourselves that it was worth continuing.
15. **GS – Have you started with the minimum functionality?**
16. SL – Yes, we started with a pretty minimal application process; a minimal site, then we started to look to expand that to a more... well, our sales processes have become increasingly active both on marketing on the site and the continuing process that we offer once a customer actually submits their application. When it comes to the servicing, we start with the pretty basic module and did some very functional things; we now allow customers online to model the account in the way that they want to. They can view the account the way that they want to and that doesn't always come in from the sales perspective, but, for instance, if you want to save for a particular thing, if you want to bring a loan, say a fixed term loan, over when you setup your products to the shorter term than your mortgage, which is often the case, and you want to see how long you can take to pay that off – so, effectively overpay, just to get rid of that early – then you can do that as well. So, there's all sorts of modelling that you can do within the account; you can save for your daughter's wedding, these sorts of things. So, this is the latest innovation that we sort of got onboard, I guess.
17. **GS – When you set this up and offering, like you said, a combination of the telephone channel and the Internet channel, how have you seen the volumes of traffic moving? Because there is a contention, for example, that people who are self-serving are actually less inclined to use the call centre and then there are other executives I've been speaking to, who say that this is actually not the case; that you have something like a simultaneous boost in terms of servicing, maybe on different aspects, like for example technical aspects, or questions on specifications and so on.**
18. SL – Basically, the stronger your Internet servicing capacity is – our experience says – the lower the proportion of calls that you get into the call centre becomes. So, in a conventional model, you'd expect, if you didn't change anything, and you doubled the number of live accounts you've got, you double the calls into your call centre: this is not the case. It's a much more successful in taking routine calls away from call centres when you've got online service capacity in use. But what we *have* found is that there's an increase in the technical and there's also an increase in the more complex questions. So, it means that you can channel the skills of your operators in that way. And a large number of our customers would use both channels to service their accounts.



19. **GS – What would you say was the rationale for making all these – just as you described them - tools available to the customer? I mean, for example, you can actually spread your account into different artificial bits – like you mentioned savings for your daughter's wedding and so on. Would you say that this is more of a move to, if you like, pass on some of the CRM systems benefits to the customer? Is it about targeting more sophisticated customers? Is it about moving towards a more personalised banking kind of attitude?**
20. SL – There's an element of that, but I think, first and foremost, it's in response to customer needs. You've got a complex product; if you understand it, it simplifies the way you manage your finances. But you *do* need to understand it; and you *do* need to feel like you're in control. If you feel you're in control with the One Account, you really do feel that you're on top of your finances. But if you don't, then you can feel completely at sea. And so, the improvements in our Internet banking site have been geared to customer need; we have a service USP – and nobody else offers anything quite like this – it's got many of the functions that, say, Money and Quicken would have but much more than that as well, and it's much more straightforward to operate; you don't have to be an Internet or Excel wiz to operate these things. But it's really in response to what we've perceived the customer needs to be. Are we looking to use it within a certain segment of the market? Not particularly. That's an added benefit. We're looking at it as a retention tool, I guess.
21. **GS – Right. Stemming from what you've just said, do you think that should it not be for all this IT capacity – and I'm talking about the back-office capacity and, if you like, sophistication, and should it not be for the Internet delivery channel, the customer proposition would not be able to kick off? What I am asking there is, for example, do you believe that should Virgin One remain as a telephone banking operation, would you be able to launch that product?**
22. SL – We did launch originally as a telephone product only, back to 4,5 years ago; now, having said that, I don't think we would currently be able to survive as a telephone-only product. Our Internet functionality, particularly in the service side, is vital to our proposition.
23. **GS – Coming from that, what relation do you see between Internet capability and all this financial innovation and, if you like, financial engineering, if we try to look at it more in banking terms, in the future?**
24. SL – Right. I think that customers are increasingly inclined to take control of their finances, but I do think that customer attitudes are heavily segmented, as much now than probably ever before. There's a percentage of people who wish to do all of their banking over the telephone; there's a percentage of people who wish to do as much as they possibly can over the Internet, without any human interaction – and that includes from application, all the way through to servicing their account – if at all possible. But equally there is still a very significant percentage of people who are out there, who actually want face to face, they want to be able to speak to somebody who will give them advice, and potentially hold their hand throughout the process. We feel that all 3 of those are actually significant marketplaces for us to be in. I think what it is, is that we see increased segmentation of the customer base in terms of their attitude towards technology in the way that they wish to do business. There's no indication, for instance, that the percentage of people who want to handle things face to face is dropping.
25. **GS – Right. Does this have to do, in any way with Net Worth?**
26. SL – I'm sure it does. I'm sure it has to do with personalisation and who knows what will happen now? The more personal service we can offer, then I'm sure there

is a certain group of potential customers that we could get, that we don't at the moment. This is a wonderful product for the self-employed, for instance. But these are also people who do like to have a lot of hand-holding. They like to have somebody to sort that stuff for them. So, there's a potential conflict between control to the individual and time for the individual. Does that make sense?

27. **GS – Yes, absolutely. Now, I'd like to move on a bit to more project-related issues, and what I'm talking about is setting-up the project internally for launching any Internet banking application. And I'd like to ask your experiences about that. Let me start first of all from the decision-making processes there, for launching a product. What are the decision-making processes like, regarding the launch of One Account? And what I'm referring to there, is the role of the different groups and dynamics; the role of Finance, IT, Operations, Marketing departments and so on, into shaping the whole thing into one decision?**
28. **SL – It's pretty much that the decision-makers within our business meet on a very regular basis. The decisions are made pretty quickly and our structure is – even though we are pretty big now – we continue to have a fairly streamlined vertical and horizontal structure, so that we can make it quickly; the key players are at the senior level; you touched on the key players here, you know, Business Design, the people who can technically take this forward, Marketing, Finance and Sales, all have a significant role to play in the development of the proposition, and we've got a pretty swift process now for actually taking that to market, once a decision has been agreed within our business and then agreed by our Board.**
29. **GS – As I said, as I was speaking to a number of financial institutions, there are actually 2 approaches on decision-making more or less, and it's more an organisational issue: like for example something like a silo approach, where you have your business case built by people who believe that they can do it, and then this goes through Finance – in a bottleneck manner, if you like – and then goes through to the next stage, Strategy etc. and it gets signed off by different other people; and there are other organisations who follow the process of integrating everything into a more cross-functional way to get better results.**
30. **SL – Right. Of the two models you described, we would be nearer to the latter.**
31. **GS – What I am trying to investigate there, is more than everything, the role of the Finance function, because I am specifically researching the investment appraisal side, where the financial side is key there. And what I would like to talk about is the dynamics of the financial side of things.**
32. **SL – There's a close liaison between the 3 key areas that you've mentioned, which is Marketing, what we would call Business Design, which comes as the technical as well as the analytical, and Finance, at the senior level to develop the proposition, to develop various propositions. And it's pretty much a team effort, but Finance would take this to the Board together with the MD. I am a bit limited on how much detail I can go into because, being an RBS company, I have to stick within things that are in the public domain. We're pretty much close to reporting season.**
33. **GS – I perfectly understand that. I would like to move on now to the identification of costs and benefits and the actual investment appraisal process. First of all, I'd like to ask you, from your experience in launching this product – you said you started with the minimal functionality and then added more functionality and now you've got the fully-fledged customer proposition. In terms of monitoring the whole process and identifying the**

**costs and benefits during the implementation, would you say that there were any unanticipated costs or unanticipated benefits that you came confronted with and that you had to deal with in the process? My question actually relates to how it has actually moved from conception to completion.**

34. SL – Well, there were lots and lots of minor things, but to be honest I wasn't terribly close to that project when it was developed. I had a sort of watching involvement, rather than an acting involvement, but my impression is that it was technically – certainly when we came up with the full service proposition – a very tough delivery. And we had incredibly tight deadlines as usual, but it was particularly the case in this. Our projects are all delivery-based: there's a delivery day and everything else feeds back from there. We don't take the alternative approach, which is we work on it until we're absolutely certain and then we release it. I don't think we've ever missed delivery on a project; it's just that sometimes we've delivered *more* or *less* of the original scope.
35. **GS – How has that impacted on costs there? Because I know that time costs; in fact to be precise, speed costs.**
36. SL – It does. It *has* had an impact. Again, I'm probably not the very best person for you to speak to here, but my impression is that it has had a cost, but never had the cost seriously impacted what we expected. We were able to build in a margin for overspend, because we were struggling to meet deadlines; we don't suffer, like a lot of organisations, with a vast number of consultants and people with IT contracts and this sort of thing. The vast majority of our IT people are actually employed by us, which means that the staffing costs are fine. The biggest issue, I think, that we might have involves liaising with our larger organisation, the Royal Bank. And, for such a massive organisation, they're very swift to respond, but there were nevertheless one or two costs around that, I feel, but I'm probably not the best person to go into too much detail on that, because particularly on this project, I wasn't that close to it really.
37. **GS – Alright. Again from the observations that you made there: have you seen the perceptions about this Internet functionality or whatever this project would deliver, change through time? What I am talking about there, is from back in 1999, when we had this dot com boom, up until now, 2003, where the situation is a lot different, have you seen these perceptions changing as to what it would cost, what the benefits would be, how sanguine the projections were in the whole process of investment appraisal?**
38. SL – I think, technically, things have probably not progressed in the way that we thought they would. You know, I think that lots of people have been caught out and we're lucky that we're not one of them; we haven't been caught short on things like investing in technology that was not successful. We haven't put a lot of money in the direction of SMS or any iTV or WAP; none of those things. We've only looked to use those as significant technological advanced; what we did look to do was to maximise the innovation within our product, because it's a very innovative product anyway, and utilise the *available* technology to its maximum, once it's got proven capacity. I am largely talking here about the Internet and obviously the telephone; so, technically, we're not that sophisticated, I would suggest, but what we are is that we get the maximum that we possibly can out of proven technology. So we don't speculate in that respect. I don't know if that answers your question or whether it's at all helpful.
39. **GS – It's helpful; I actually wanted to focus on how these changes from what people believed it would do then to what they believe it will do now; what were the elements there and how was this reflected on the investment appraisal processes?**

40. SL – I think the thing to remember is that we were a very very tiny organisation in those days. We started with 40 people 4,5 years ago; so, what the views and aspirations of those 40 people were, or probably 4 or 5 key individuals at that time, and where we've come to now, are significantly different. It's not as if we were an existing large organisation that then moved into new technology and embraced new technology and had expectations over it at that time, we were starting a new product, completely new to the world of banking from scratch, and everything was a blank page to us. So, the question has probably got less relevance to us than it would to an organisation like Natwest or the Royal Bank itself.
41. **GS – I see, but again, I guess back then there was, if you like, an investment appraisal template or a process in place, and the inputs to that were coming from process owners, project owners and so on. How has this developed from then to now? I think that this question is actually regardless the number of people; how the processes developed.**
42. SL – I don't have a great deal of input on that; I wasn't that closely involved in the initial setup; I was actually involved in the business at that time, so, I don't have a great deal of access to that stuff unfortunately.
43. **GS – OK. Regarding again the implementation process: is there a post-implementation review process in place?**
44. SL – There is, yes. It's something that I think we're not particularly strong with, but it's something that, as we've grown, we've realised the significance of, and certainly our latest project has got a very significant PIR function within it.
45. **GS – How does this result from PIR? Is this some kind of documenting for the sake of knowledge for projects to follow? And where does this PIR focus? Does it focus on costs? Benefits? Processes?**
46. SL – There will be two components to it. It will focus on costs and it will also focus on benefits and issues: things that went particularly well within projects, things that went particularly badly, and we will feed back in terms of the project implementation; we'll do a significant review in terms of project costs. Both of those will then feed into the overall PIR on the project itself. Historically, I would say, one of the things that we've been weakest at in the organisation is PIR and any form of evaluation; we're very action oriented, so we'll be off on to the next project before we really seriously had taken time to investigate all of the impacts of the current project. We've sort of had licence to do that, because, unlike most organisations, we've had one product' one complicated one, but it's one product. So, that has allowed us a little bit of freedom when we were small compared to a lot of organisations.
47. **GS – As s you said, before you completed one project, you moved on to the next one; in hindsight, should you be able to do a PIR before you start implementing a new project, do you see that there would be benefits?**
48. SL – Yes, that's the ideal model, but the pace at which changes happening now [is very fast]; and the thing is that we're pretty fleet footed here; so, the people who were involved in the previous projects will be learning and understanding about the new project as it develops; and the things will feed through very quickly to the new project. So, you know, we don't have a highly regimented and linear structure; it's much more of a network. We've got free moving project teams and business teams. My only experience within the business indicates that really.



49. **GS – Yes, I noticed you had quite many roles there, so I understand this kind of thing. Regarding again costs and benefits, I mentioned again the anticipated and unanticipated ones. There is another, if you like, categorisation that comes under the labels tangible and intangible benefits; I don't know if we can talk about intangible costs. But there are actually 2 issues there: the one is the accurate estimation of tangibles; and I am speaking of the quantitatively defined in terms of finance, and the second one – a huge issue actually – is how to measure intangibles. Is this, taken from practice in your organisation, on a report basis (i.e. just reporting the intangible benefits), or is it on a quantification basis?**
50. **SL – We're trying to move from the former to the latter. So, we're trying to go from qualitative reporting to the quantitative assessment; in fact, that's what I've got to do the rest of this afternoon. Basically, this is obviously PIR and prioritisation as well. And it's from a prioritisation perspective I'll be looking at it this afternoon.**
51. **GS – Right. That was actually my next question, about the prioritisation in relation to measuring intangibles and quantifying or just reporting them. How does that currently work in your organisation? I mean, if someone is putting forward a project, I guess there is someone like a project owner or a sponsor; when there are significant intangibles that he or she believes that can be materialised, how are these put forward? Is that on an argumentative basis, or is it otherwise?**
52. **SL – The people at the senior level within the One Account actually have very broad understanding and grasp of the whole business. We can very often still get away – in terms of prioritisation at least – with being qualitative. Having said that, in order to justify expenditure with view to shareholders, obviously we have to quantify as much as we possibly can; so, in truth, I suppose, there is some element of post-rationalisation here, but we're trying very hard to move away from there. Because so often, when you have, say, a project list, once you've set your strategy in place, prioritisation within that can be fairly straightforward. There are some things that people around here may class as 'no-brainers': "there's immediate benefits to come out of this; the outlay and the time requirement is minimal, therefore this is something that really should happen". And then of course, in more significant projects, there are proposals that need to be reviewed, and they are decided at a very senior level. The MD and 4 or 5 others will decide on these figures and those decisions will be taken.**
53. **GS – Speaking of the Internet projects and IT projects – which bear the very characteristic of being more focused on the long-term and sometimes don't pay back on the short-term – what is the weight there in decision-making? I mean, for example, you're putting forward an IT proposition, which has X million cost, doesn't deliver immediately, or within a year, some tangible benefit, but either the intangible ones or the long term tangible benefits are something that people believe will be materialised; what is the balance of the decision there between the quantitative and the qualitative?**
54. **SL – The balance is moving from qualitative to quantitative; as the organisation gets bigger, the investments become bigger and bigger, the decisions become pretty much more difficult to make, and we're needing to become more and more quantitative I guess about everything.**
55. **GS – Again in terms of this quantification process, I have a list of things that I wanted to ask about. A list of benefits that are intangible; some of them are in my briefing, and I would like to ask you whether you take account of those and which ones of those you quantify and which ones you just arguing on, on a qualitative basis. Let me start first from things that relate to**

**monitoring account information, regarding activity rates, retention of customers, recruitment and so on. And this all links to the trust and the sustainable customer base. Is it something that you can more or less accurately quantitatively measure?**

56. SL – I think the trick here with all this sort of data is to keep it as simple as you possibly can; try not to measure everything that moves; decide on what your key indicators are and measure those and understand them completely. And that way, sensible business decisions can be made. I think we've successfully avoided drowning in excess information; so, we obviously record an awful lot; in terms of transactions, obviously we have to record everything, but in terms of decision-making parameters we try to keep it to the absolute minimum, but understand those ones that we do measure and track as completely as we can, and we keep ourselves up to date as we possibly can with that data, to the extent that we look at KPIs on a daily basis. Whatever part of business you happen to be operating within, you're looking at those. Once you've decided that that's a significant thing to measure, then you really get under the skin of it.
57. **GS – There is also the cannibalisation issue. The One Account is part of the RBS Group; is it something that you take account of? Is it measurable?**
58. SL – Yes it's something that we look at; it's immeasurable, difficult, it's one of the things we work in hard at the moment. But cannibalisation is a real risk. I suppose it's a risk to the Group, but it's increasingly becoming a risk to our business itself. We offer 3 different brands at the moment: Natwest, Direct Line and now the One Account, ex-Virgin; you know what cannibalisation there might be between these 3, I think that's fairly straightforward to measure, but there are other ones that are significant but much more difficult to measure. Certainly if we were to offer other propositions, we just launched with a flexible mortgage option within our intermediary channel, and that's a significant thing to measure and we're sort of heavily monitoring that at the moment.
59. **GS – Once these measurements are done, to what extent would you say these are reliable?**
60. SL – I think they're pretty reliable. I think the thing to remember is that perhaps within our organisation we don't have the legacy issues of other organisations. We're essentially still operating after one product; with the exception of our new flexible mortgage option, we've got lots of learning to come out of that very soon; it's far too early to say on that at the moment, but if you take the one product then you take everything and so we haven't had internal risks of cannibalisation but we will now, and we certainly have within our group, I think. So, I think it's probably less of an issue for us than it would be for most, but it's a growing issue.
61. **GS – A few other things; an important one, just as you mentioned at the beginning of this discussion regarding security: you have actually things that are measurable, like security costs. Things that are more difficult to measure are things like security benefits. Is there a quantitative account for that? Can you measure actually the benefits from security? Do you do that? What I mean is something like a performance ratio like, for example you say "OK ,we're going to spend 1m to improve our security in such and such features; what is the benefit from it? That benefit over 1m pounds is the performance". Something like that.**
62. SL – Difficult; But we would certainly try to treat that in the same way we would do in any other project, so we would do a similar sort of CBA prior to agreeing to the project. But I think we'd also need to... again I'm not terribly close to how we might assess that, but certainly, as a principle, it's vital that our customers feel secure

when they're online or offline, whatever. Security is vital to us within our business; we put an awful lot of attention to it, like I guess every financial services organisation does; but we haven't had any issues come our way. But when you've got the Virgin brand, as we had, associated with financial services, there is a certain element of trust; you know, "this entrepreneur, this person who's prepared to put his own life at risk, he's got my money, he's got my mortgage", so we felt particularly early on – it's less of an issue now – that we had to be more secure than anybody else. And also the propositions that we mentioned. So, beyond the traditional CBA on security, any security development was more of a Risk-Benefit rather than a Cost-Benefit.

63. **GS – I see. There were other things like rationalisation of systems, flexibility, scalability of systems – I'm moving more to the IT side – and I'd like to ask you whether these are being taken account of in a more quantitative manner.**
64. SL – Yes they are. It's one of the great benefits of being involved with the Royal Bank because of the economies of scale that we get; they are vast and we have spent a reasonable amount of time with our own IT guys integrating where appropriate and segregating where it gives us more business benefits to segregate. And scalability; I think we're in a pretty strong position when it comes to this; I keep coming back to this, but we do have legacy issues but we don't have them in the same way that most companies would have.
65. **GS – Speaking of scalability, it's actually dealing with things like, for example, in call centres, you very often deal with peak volumes and so on, you have to build redundancies in, or parts of the system that 'go to sleep' for a period of time when you don't need them and then become reactivated again, and all these things. Are these things being measured?**
66. SL – Yes they are. We've never been in a position where redundancies have been a problem for us. We've been growing our whole lifetime really; the areas of the business that do fluctuate in staffing terms, ostensibly would be Sales; you know, that's where you're going to have your highest turnover of staff anyway.
67. **GS – OK. I just wanted to move on to more IT-specific issues and that strongly relates to the methods being used for the financial and the overall appraisal of such projects, and the whole section that follows actually relates to how you take account of the long-term, which is mainly IT. In terms first of all of the financial methods, the ones that are being used on your templates in the investment appraisal process, are they the traditional financial measures like NPV, Payback, IIR, ROI etc? Or are you looking into more complicated or more advanced techniques at all?**
68. SL – My understanding is – unless people in the Finance team are using something that I'm not aware of – that we're using the more traditional approaches in that respect.
69. **GS – Are you looking into something that is more IT-specific?**
70. SL – We *are* looking into them, but I don't really have the information as to how far we've gone with it.
71. **GS – Right. Because there were a few IT-specific methods that take account of the shared nature of IT and effects like the spillover from a system you build to the whole organisation, different departments, regardless of what is the purpose for it being built and so on.**

72. SL – Any improvements that we've had or any changes to our infrastructure have had really very minimal impact on the operational areas of the business. We have made very significant changes over the last couple of years in particular, as we've scaled up and we've started to utilise RBS technology that we were previously probably not using, but when our original proposition was put forward, we were able to plan these things for scalability; so, certainly they have minimal operational impact on us as a business – obviously that's where I've spent most of my effort – certainly compared to other organisations really.
73. **GS – Regarding again the investment appraisal process, but regarding actually the people involvement there, how would you describe the relations among different expert groups? And what I'm talking about there is, for example, if you go to the earlier days before the Internet and before technology became very heavily involved in the financial services sector, you had expert groups like the bankers and actuaries who were actually holding the power; nowadays and with all that involvement of IT and business development, you have Finance, Marketing, Sales, all these different kinds of expertise. In terms of people who hold the power in decision-making and in putting forward the proposition and so on, how do you see the balance of power developing?**
74. SL – I think I see it developing for direct operations, if you like, so I would say that anybody who is operating with a strong technological platform, I think it's very much around 3 areas, taking joint responsibility. And that is Marketing, Finance and the technologists.
75. **GS – So, again, is this actually a new kind of hybrid expertise?**
76. SL – I think so. I think if you take the basic operational model of a structured network over a decently sized organisation, you've got to have cross-links at a senior level and all the way down the chain between those organisations, if you're going to respond to need. And you've got to be fluid now; you've got to be able to act quickly; increasingly you're going to have to do this. And I think this is where I personally feel that we're going to be led by those 3 areas of the business. And clearly the shareholders are going to come in there pretty heavily as well; that's where I feel that people who had traditionally control are going to come in.
77. **GS – I see. I'd like to move on – again relating to the investment appraisal processes – reporting structures to the market. There is the contention there that the reporting practice, if you like the accounting practice, is what actually leads the investment appraisal process. For example, investment appraisal processes are supposed to be there in general to appraise, give an indication, as accurate as possible about what this project will deliver. Is this being led by what is being reported to the stockmarket? I mean 'what you measure is what you report'. This is what I'm asking actually; because there is a proposition that this may be some kind of myopia in a sense, short termism and all these problems which can be detrimental to taking account of the long term.**
78. SL – I suppose you've got some tread flayed foot between the two really; try to meet the needs of short and long term shareholders etc. The fact is that, if we look at our position, we're a pretty small part of a very large organisation. One of the nice things of being involved with one of the very large organisations like the Royal Bank is that they do give quite a lot of freedom for organisations to run themselves the way they want to run. They can prove themselves to be effective, and we do that. So, we have quite a lot of autonomy on the way that we operate but, yes, we do have to meet their requirements; and that's something that, as the role of the Royal Bank has become more and more apparent, that's something that we all



within the organisation are much more aware of, which is interesting to see how different people interpret that. Broadly speaking, everybody is very very positive. I know that probably that doesn't answer the question really.

79. **GS – It touches on it really; I know that you may not be able to answer all my questions, but what I am actually moving into there, is again power issues in the evaluation process and whether evaluation is based on... well, it's actually about defining value. It might be that some organisations are defining value simply as shareholder value, and this might mean reward through dividends and strong share price and so on; and if that drives the appraisal process, then you're looking into the short term rather than the long term.**
80. SL – I think our philosophy and approach is very much linked to the bank, and that is very much long term building. If you think about the gigantic leaps that the Royal Bank has made over the last few years, then that sort of indicates where we fit into the whole package. My feeling is that they very much look into the future and building for the future; they're not tactical these changes they make; they are strategic and they're long term.
81. **GS – OK. That more or less answers my question. Another issue I'd like to speak about is knowledge management. I'd like to discuss with you the role of using the Internet as a customer interface in relation to the quality of information first of all that the organisation is getting about these customers, and the way that this is being applied in terms of the knowledge management side. First of all, do you see any relation between the application of the Internet channel in Internet banking and knowledge management?**
82. SL – Potentially, but I don't think that we're anywhere near where we need to be on that.
83. **GS – In what terms?**
84. SL – I think, like most organisations, we're probably running to stand still really; we're trying very hard as to keep on top of customer need, when it comes to knowledge management. We're talking of knowledge management, but this is a term that is used in several contexts; what context do you use?
85. **GS – Well, I'm trying to use it as realistically as possible, not in the sense of information management; I'm talking about the kind of knowledge about the customers that is distilled and organised in a way that it can be used across the organisation, not anymore as information purely, but something that goes beyond the simple customer profile that is given from a CRM system.**
86. SL – Right. I think, our philosophy to CRM generally is that we try to keep, whilst it's very very significant, it's very easy to get bogged down in the detail and lose the basic customer needs. We've observed that many organisations have spent a significant amount of money capturing and trying to analyse information that is just far too vast for them to do; so again, going back to what I was saying before, we try to stick to what we really know matters to the customer, and we focus on those things and really understand those key drivers for an individual or a group of customers, and respond there. There's still an element of gut feel there; any amount of data won't necessarily... well, the data can obscure I guess is what I'm saying. We try to keep things as simple as we possibly can.
87. **GS – I just wanted to move to a lower level and talk about the quality of information – not merely the quantity but the quality of information that you're getting from utilising this channel. What I am asking there is, what**

**was your experience from moving from telephone-based operation into a combined Internet and telephone operation? Is the information that you're getting from customers who are self-serving of higher quality?**

88. SL – Yes, I can say it is. The quality of information that we're able to track on our customers is probably higher; whether we do anything with it is another matter {laugh}. As I say, we're sort of scratching the surface of what we could do with it, but we're sticking to what sort of more matters to us and what we can realistically utilise at the moment.
89. **GS – About the quality of information, you just mentioned that you're just scratching the surface of knowledge management. I wanted to ask something about KM there: is there any participation of this improvement, if you like, in the investment appraisal process at all? Is it there? Is it quantified? Or is it in the form of an argument? In what shape or form is it?**
90. SL – Difficult to say. I'm not terribly involved in the analysis of that back end of things within services. I don't really know; it's really too much detail for my involvement I'm afraid. So I can't really help you.
91. **GS – OK. That's fair enough. One thing that I wanted to ask more relates to what you believe to be the future of banking in the UK. What I'd like to ask you is your comment on what has happened in the past, one or two years ago, I think, with the occurrence of account aggregators. Would you like to comment on that? Is it something that you see as a competitive product in a sense? How do you see it taking off? Do you see it taking some part of the market? For example, do you see Citibank offering account aggregator services, being a threat to yourselves?**
92. SL – Well, I just welcome it really; I mean the more people who are seeing aggregation think it's a good thing and I think, if it brings more people to the fore who can offer it, the more people are aware of it and then the more people are likely to take on with our product and consequently I would say, I think we have a very competitive product and we have a very high quality service proposition to keep our customers once they're with us, so we welcome, I guess, that sort of thing.
93. **GS – Right. That's actually more or less what I wanted to ask you. There were just one or two final questions. First of all, is there any type of documentation regarding what we've talked about, that you would be able to provide to me at all?**
94. SL – I don't think there's much I can give you at the moment, particularly now; you've probably realised I've been quite circumspect in some respects; I've tried to be as open as I could, because it is a sensitive period for us, so I have to be careful about what I say. But if you were to mail me with the sort of things that might be useful, I could sort of see if I could do something about it for you.
95. **GS – Yes, of course. Mainly it's about the investment appraisal processes and decision making processes; and if you have something like templates and things, without any numbers on them, of course that you could provide, that would give me a better understanding of your approach. PIR's etc, again I'm interested on the methods rather than the actual information or detail.**
96. SL – OK. I think, the best thing to do is, if you can pop that into a mail then I've got something that I can circulate rather than having to go face to face to people. Then I can follow up once people have some sort of something to work with.

97. **GS – Yes absolutely, I can do that. Thanks very much. The other thing is, do you think from what we have talked about that there are any people in the One Account that it would be useful for me to speak to?**
98. SL – Possibly, but I would suggest that the best thing to do is for you to give me your documentation requests and then give me the chance to have a word with people that might be useful for you to speak to; just to see whether they feel there's anything that they feel they can contribute, or whether they have liberties to contribute. Does that make sense?
99. **GS – Yes. Sure I can do that. And the final one is, we've been talking for more than an hour; you know more or less what I am looking at. Do you feel that there are any areas that I'm not looking at?**
100. SL – That's a good question. I think you're hitting on a very interesting area. It must be quite a struggle in places to understand how organisations are actually handling this, because this is increasingly significant information that the organisation would want to keep to itself, I guess. I can't think of anything immediately, but if I do, I'll certainly pop in to reply. Is that alright?
101. **GS – Yes, absolutely.**
102. SL – One thing I was wondering, if this is going to turn into some form of report, is there any chance to get hold of that when it's generated? Your actual paper.
103. **GS – Yes, sure. . This is going to turn into some kind of case study, not explicitly about your organisation, but an aggregate case study. If you're asking about access to my research results, I will be happy to provide them once they're there.**
104. SL – That would be really useful. It's been good talking to you. Sorry if I've been evasive at times.
105. **GS – No, that has been very very useful.**
106. SL – Alright then. We'll be in touch.
107. **GS – Thanks very much. Goodbye.**

## **7. TESCO PERSONAL FINANCE (RBSG PLC.)**



1. **GS – First of all, I'd like to tell you a few things about where I come from so that you can understand my background. I'm originally an electronic engineer, I did my degree in Greece and I worked there for 3 years as a networks engineer, I took an MBA in Edinburgh, then I started this PhD. The main subject is technology management. And I am particularly fascinated by the way that technology is shaping the financial services sector. My interests are linked especially to the identification of costs and benefits of Internet technology, and more specifically of Internet banking. So, that's where I come from. Now, would you like to say a few things about yourself?**
2. **CG – Basically, I graduated from Aberdeen seven years ago; I spent a year at Penn State as part of my degree; I've been in Tesco since I graduated and started off in retail with various things within Tesco, then went into marketing Tesco stores; and then about 3 years ago I decided to join TPF, and initially I was the product manager in marketing life insurance, pensions and also ISA investments and I moved over to more kind of a store design role, so pictures and fittings. What we're doing to display leaflets and promotions in the stores, only last October; so that's what I'm doing currently. A big project that's going on is this Single Customer View. Basically the way TPF works is a joint venture with RBS. Within Royal Bank, they've got Green Flag and Direct Line which deal with the insurance products; they also have, almost like a third party agreement with Norwich Union; and Norwich Union isn't actually owned by the Royal Bank, but they have a third party agreement. So basically all our products really are branded as Tesco, but at least one, or maybe at least some products [come from elsewhere].**
3. **The idea with Single Customer View.... So, if you are a TPF customer, you may have a credit card with us, you may also have a home insurance policy but these sit on two completely different databases; so one is at Green Flag's computer systems and one is in the Royal Bank in the credit card service centre. So there's a big project going on at the moment, trying to bring them all under one umbrella; if you as a customer phoned up and said "could you tell me how much my credit card bill is going to be, and by the way I have a query on my home insurance", so whichever centre you call, we have one screen and will be able to answer these questions. So, that's what we are working on currently; and sure, with the research we've done, it sounds quite simple and you almost expect it to be like that but it's a huge piece of work, and it's integrating different parts.**
4. **GS – Which ones would you say are the main contingencies in building this up? Probably, when a project starts, you say "this is what we expect that will happen" and so on. What in your opinion were the most unanticipated aspects in this one?**
5. **CG – I think really it's just the scale and the size and because of the length of time it has taken, the goalposts keep shifting; so in the beginning we thought we can do this, while when we actually got down to the detail we find that, well, that's going to cost another 5m to include that change and it is just constantly growing; and the other thing is, since we started, what they did was introduce new products as well, so they obviously had to be included in the product; when I first started two years ago and we were hoping to be completed in 12 months, and it's still not complete yet. So it now has to go into phases; phase 1A is now going to testing; it will be released probably in August to the consumer; so they'll see some things; I think just because the technology is changing and because we're so dependent, because TPF isn't a company in its own right; it has to depend on other systems; so for example, the Royal Bank is now merging with Natwest; that's the Royal Bank's priority for the next 18 months; there's no changes allowed to be made to the technology at all, because all the resources concentrate on that effort; so I**

think, it's just that the goalpost have changed so many times; I think as times have gone by, you almost want to be more competitive as well, so we want to be a step ahead of what anybody else is doing; so the projects took much longer than anyone had anticipated; and we had a growing number of accounts as well; I don't know how much you know about TPF, but we have over 3m of accounts opened; that's not customers actually but accounts. And the difficulty is in bringing them all under one umbrella.

6. **GS – You have spoken of new financial products. Were these RBS products which were somehow tailored to hit Tesco's target group?**
7. CG – Well basically what they do is that all the products that we offer are based on existing ones; so if it's not Royal Bank, it could be Green Flag or Norwich Union, and what we'll do from the Tesco point of view is to be very specific about the brand values and the value for money; so, they can't just be repackaged as Tesco; they've got to have something to differentiate - usually it's pricing – and because we sort of piggy-backing on existing call centres and existing technology, we almost don't have the start-up costs. That's the deal that we've done with the Royal Bank. And additionally, our main channel, although the Internet is growing all the time, is acquisition through stores; so we don't do... only very recently we've done advertising on television or in newspapers, it's always primarily been in stores. So our acquisition costs couldn't compare to those of MBNA; they're not a bank so they have to buy mailing lists and they do a lot of direct mail. We piggy-back on Tesco's; we use the Tesco Clubcard database to get people acquired; so we're looking at every checkout in every store in the country; so whereas the average application cost for credit cards is about 175GBP per credit card, ours is 20GBP. The benefit appears to be great.
8. **GS – Probably the TPF online operations were initiated after the online shopping facilities. Was there some kind of piggy-bagging there? I mean, in terms of the technology.**
9. CG – Not in terms of the technology that we use; the TPF web site, although it sits on the Tesco.com website, it is completely separate; it has nothing to do with Tesco. It's more like back-end on what Green Flag are doing; What they can physically do is, for example, credit cards; you can't physically get a decision online at the moment because the technology is not available yet within the bank; so that restricts us greatly. So it's not so much that Tesco.com doesn't work with the bank; it's more that we're not backed up with the functionality for it. Obviously TPF website sits on Tesco.com because it just makes sense for the customers; that's the way they see it. They can access it directly from there.
10. **GS – Would you agree to the statement that if it wasn't for the prevalence of the Internet, Tesco wouldn't go to the personal finance area?**
11. CG – The decision to go into banking was made before we went online; I think we probably knew what would happen, but it wasn't that we knew that 40% of our sales would come online and 60% through the store; when we first did it, it was that we were doing it primarily through the store channel.
12. **GS – So from what you know and what you gather from company surveys, what is the relation of the customer base of Tesco supermarkets to the customer base of TPF? Is there a clear relation?**
13. CG – About 30% of our customers, TPF customers are Tesco shoppers. And they tend to be customers who...a lot of them come through online; and they'll use search engines to find the best loan rate or the best credit card rate or the best

motor insurance, and that's how they come in. So, 60 – 70% of all our customers are Tesco customers.

14. **GS – So does it work that way? A Tesco customer buys into Tesco financial products? Or is it the other way round?**
15. CG – I think they're Tesco customers first. And then what happens is that they become TPF customers and then they become more loyal to Tesco and they're also more likely to relate to a second TPF product; so I think the Tesco customers are TPF customers; have bought it on the back of the brand of Tesco, because they expect value for money, they expect they won't be ripped-off; the supermarkets are good so obviously they expect the same from the bank and they make assumptions.
16. **GS – Right. Now about the customer base: how have you seen the customer base of TPF growing through time since its launch?**
17. CG – Well, this time last year it was about 2m accounts, and this year it's 3m; we increased by 1m customers in the last year.
18. **GS – In these accounts, do you include all mortgages, loans, car insurance policies, savings...**
19. CG – Yes. Most customers would only have one product. Maybe 20% of our customers have more than one TPF products. So what might happen is that they may have a loan and they pay-off, and then they get another loan or if they have a loan, they may apply to get a credit card; so the majority of our customers have just one product.
20. **GS – Which ones would you say are the most successful products?**
21. CG – The most successful at the moment is motor insurance; and I think we've been doing a lot of advertising, affinity marketing online. And likewise with loans; but in terms of the biggest number of customers we have, these are credit card customers, and this ties back with Tesco Clubcard and Clubcard points; and if you use the credit card you get extra Clubcard points; because there are 8m Clubcard customers in the UK, so ideally this could make 8m Tesco credit card customers.
22. **GS – Is there a process for measuring something like activity in accounts? This is actually something that touches on the issues of the evaluation of using the Internet as a channel.**
23. CG – Is this in terms of new accounts?
24. **GS – It is in terms of activity rates of not only new accounts but all accounts. What I mean is that you may open an account; say, an Internet savings account, and put in for example 1000GBP and it just sits there. Effectively, it's not exactly profit making for the organisation.**
25. CG – I see. I think it depends on the product; for products like savings we do a lot of research; you don't offer a savings account, for exactly the reason that you said, unless you've got a higher balance. It's not in our interest to get lots of customers with, you know, 50GBP; if we're having 1m customers with 50GBP, it costs us more money to actually actively manage these savings than benefit of having them. So you really have to juggle on each product; and if you look at insurance, are they renewing? And that kind of thing. So, I know that there's a lot of work to be done with savings customers. I wouldn't say that you would look specifically at which channel they come-in on; it's just about what can you do to get them to

increase their balance, and likewise with credit card customers. If you take a credit card and it's initially on 0% interest, you then stop using it; the objective is to try to get them start using the card again. And I think, because it's just growing so quickly at the moment, the fact that there was no space over there [i.e. space to book for the interview], is that the business is growing. We probably haven't done a lot of detailed analysis on that channel. But it's certainly in the pipeline. Things are going so quickly, and we are literally struggling (for space) we're just increasing our resource all the time; it's something that we're aware that we need to look at; we're certainly doing it on a product level but we probably are not doing it by channel.

26. **GS – Right, I see. So what you're saying applies to the personal finance section, rather than the ...**
27. CG – Yes, I think savings is probably closer to it than any other (product) because it is easier; it is more transactional; savings and credit cards are more transactional products; insurance products are only renewed once a year so you would look at it much more in as a blanket approach rather than how the customer was acquired in the first place.
28. **GS – I would now like to move on to another thing. There was a recent report in Datamonitor about switching financial service providers. Is this something that you mind about yourselves? I mean do you see people switching as an obstacle?**
29. CG – I think, certainly, for us it's not an obstacle because probably they're switching to us. I think there has been a lot of press about people switching credit cards in particular, because customers are much more wise to the fact that Egg aren't offering 0% interest anymore when they switched to that credit card; I think there is a big inertia. Barclaycard is still the No. 1 credit card used in Tesco stores and you've got to ask the question "Why?" its interest rates are higher than anybody else. It's that people have (had) it since they were at University, it was the first credit card they had. So, I think certainly with insurance they look at... I think insurance is more of a commodity product and people do shop around and they're just looking for the cheapest one. We do quite a bit of research with individuals to see what's happening with that. I think we're probably more likely to benefit. We're the ones people are switching to, rather than the ones people are switching from.
30. **GS – Form the point of view of the provider that people are switching to, from your experience, are switching difficulties something that people usually complain about? When people wanted to switch to you as provider, did they actually have problems in switching?**
31. CG – I think we try to make it as easy as possible; and certainly with credit cards, a part of the application process. And I think this is across the board with TPF in every single credit card, they ask you in the application what balance do you want to transfer, so it makes it as easy as possible to change over. I don't think we're breaking any ground there, I think we're following rather than doing anything radical.
32. **GS – There is a proposition, speaking again in terms of the strategic properties of e-banking, for a decomposition of the banking model into something like what happens in the utilities (production – distribution – supply). Do you see that prevailing?**
33. CG – I think, increasingly, because so many companies are merging as well, that everybody is owned by everybody else. I don't know if they follow the same sort of utility model; I'm not sure about how much the average customer will know who is the backer behind Tesco credit card, or Sainsbury's credit card; and I think it's



more likely to go where firms merge and there will be less and less of the traditional banks, like Halifax or Bank of Scotland and RBS and Natwest and Lloyds TSB; they're increasingly merging and I think what happens in instances like Scottish Widows and Lloyds TSB is that they'll take on insurance companies and it will just become a few multinationals and certainly if they look at banking models in the US, very few national banks are open to the consumers; they're there for industry and commerce; it's difficult to tell; in banking, they're more likely to be few very big players in the UK rather than ... Even if you look at Egg, Prudential, they're just different brands. But they're the same.

34. **GS – In a similar way, there is another proposition which is actually about Net Worth; segmentation of the market in terms of net worth. Is this happening now, and do you see that happening in the future?**
35. CG – Well, from a personal level, at work it was something that I was close enough to evaluate that. Even at a purely personal level, things like the Norwich Union relationship; Norwich Union was interested to get into a relationship with Tesco as a distribution channel for them. They recognise that customers see direct mail as junk mail, but if you have a leaflet displayed in every checkout, it's not hard sell, it's not like you go through a financial adviser. I am sure, that they're looking at it, I think maybe more in the insurance, they're biased in their books; they're still big and they've been around for so long, but they're not actually growing in any way, so they have to think about how to increase them, their net worth forward. I think they're doing that by distribution channels and I think that's what these companies do; like Prudential; that's why they created Egg; it's that they see it as separate entities; that's the way they're going forward.
36. **GS – Right. Now, in terms of the overall decision-making process on projects related to Internet Banking. The process in the company is that [projects] go through different stages, as for example, building the business case, the financial case and so on. Is this a linear approach?**
37. CG – Anything you put forward to launch has to go through; specifically, because it is TPF, it has to go through the Royal Bank board, and also the Tesco board; and it also has to go through what we call a new product approval process which is related to credit and risk rather than anything else. And that would include technology and reputation and different things sort of covered on from that; and I think, to get it through, it has to be offering value for money to the customer to get it developed as a TPF product. It has to be seen as pretty much mass market, we're not about specialised products at this stage; we're still focusing on the mainstream consumer; we're not interested in developing... we're always kind of looking at investment products that will be recognisable; our consumer base is not ready for that yet. They're not that straight financially.
38. **GS – Where I am getting at, regarding the finance function and how the budget gets approved; there is the overall contention that sometimes the finance function may work in a political manner as the bottleneck and a filter.**
39. CG – Are you talking about financial approval for taking projects forward?
40. **GS – Yes.**
41. CG – I think, we're in a completely separate situation; the TPF board if you like is made of Tesco and Royal Bank boards, and the members of Royal Bank tend to be of accounting background; there's no one I would say is the key financial director or the key decision maker. TL is the CEO of Tesco and the Chairman of Retail Direct (NMC) in the Royal Bank are the two people who make the decisions;

rather than it would be made by...It is more of a branding input; obviously there will be financial constraints to be [imposed].

42. **GS – So, are you saying that it's something like an integrated process; that as the proposition goes forward, then there is some kind of financial evaluation?**
43. CG – Yes. We do have criteria of how much profit it is expected to make in the next five years, and if it doesn't pass that test it will not go forward.
44. **GS – So is it something like payback criteria?**
45. CG – Yes.
46. **GS – A question on, not actually the product development but the project itself. So, when you get down to the proposal for Internet Banking or an online product, what is the overall process regarding the technology, regarding what will be necessary organisationally, what project teams have to be set-up and so on?**
47. CG – I think, just because one of the partners is Tesco, almost daily you get inundated with "Have you thought like this?" from different companies; from various sort of small start-up companies to some of the major insurance firms. Where as and I guess what we've got to be aware of is obviously these financial constraints. I said earlier that unless it delivered X amount of profit and it wasn't a five year plan to achieve a particular profit, we wouldn't even consider it; and I guess the other thing is that because TPF is partly again Royal Bank, we have to be aware of all the political issues that they might be aware of as one of the providers. So, if they're already in relationship to the Bank of Scotland, is that something we need to consider that we'd not use it; is there a risk element from that kind of thing? And likewise with Lloyds TSB; and in terms of our technology and building any platforms or new product approval processes, we tend to look at, and certainly within the relationships that Royal Bank has with insurance business and all the mortgages and investment brokers and everything that they've used, we certainly wouldn't go with a competitor; we could do it in-house. It's not until you actually think about how big the Royal Bank is, that you see how many opportunities there are available. You'd maybe want to go out to Prudential to offer a particular insurance product, or if somebody like Green Flag is looking at doing anyway, and we just piggy-backing on the back of that. And then I think, the key for us, we slightly differ from other Internet companies because of the apparent situation we obviously want to piggy-back as much as possible, because that's where the cost benefit has been to our customers.
48. **GS – Would you say that there is a different kind of treatment to Internet projects or IT projects in general from other capital budgeting projects – like, you know, acquisition of office space and the like?**
49. CG – Certainly that has been the biggest project we've been working on since I've been here and it's just growing; and certainly the biggest in terms of resource and people and also in terms of money; and I think, we have an issue here with the office space, and we're looking for a new office in Edinburgh; I think there hasn't been any other Internet development, any Internet project that has been particularly high up there in the agenda in terms of importance.
50. **GS – In terms of the way that you're evaluating the project, is there a difference there?**

51. CG – I think it varies from project to project; I don't think you can give it any sort of blanket approach. And one of the things that you would look at, because Tesco is very customer-orientated as well; at the end of the day, what's the customer benefit? And some things are obviously easier to measure than others.
52. **GS – I am talking about specifics on IT and the investment appraisal techniques themselves. To give you an example, if you're launching a new Internet venture like TPF online banking, you have things like the rationalisation of the systems and so on...**
53. CG – I think, for us, we're in a very difficult situation because we're very dependent on the Royal Bank, because we don't have a system of our own and we're piggy backing on RBS. We're almost depending on them in terms of their functionality, and what they're looking at; so, I think, it would be very difficult to say that we would be someone who would do completely different than what else has been done in the rest of the Group. We tend to piggy-back on that rather than saying "we've got a better way of doing this" in terms of the money that's available to us compared with the rest of the Group. It would be dependent on them; they lead it first and we piggy-back on the back of it. Just to give you an example, one of the things that we *have* done is a mortgage provider service, a mortgage finder service and that was completely separate, I guess, for TPF; it was nothing to do with the Royal Bank; just wasn't what we do on our own; we don't see ourselves as big enough for having this and to be able to manage it on our own.
54. **GS – Regarding the implementation process, let me ask a few things on the formation of groups to bring the project to an end, the dynamics between the groups and actually where I'm leading this, is the issue of expertise.**
55. CG – Basically, we've got an IT director who sits within TPF; we've also got an Operation and Change Management director, so, depending on the project, you'd have experts, hopefully in that area, or alternatively we would call somebody else from the bank; so we've got the expertise that's required; and they would come in potentially in secondment to manage that kind of project.
56. **GS – Would you consider IT expertise, or financial expertise to be more important in such ventures?**
57. CG – I think, because we're a bank, we've got financial expertise just on this floor. I think because the Internet and specifically IT is changing so rapidly, then you can have experts, people with more knowledge or more awareness of what just happened, so we're just taking a lot of consultants as well and secondments for such a big project. Financial expertise, we probably have in-house. And what I haven't seen is having to second anybody from any other area of the bank network to work in Finance; whereas obviously in IT things are constantly changing. That has been the case for consultants.
58. **GS – What would you say has been the effect of what you just mentioned – IT change – on the nature of the financial expertise? Is there any relation there, or do you see them as two separate things?**
59. CG – I think, it's partly educating the financial, in terms of what the long-term benefits might be; because in such big projects that you may be involved in, it might be hard to evaluate from a financial point of view; there might be more like customer benefits; I mean, probably there is an education to be done there; obviously the Financial Director is a key person in terms of decision-making and going back to Tesco, because Tesco is so customer-focused, they would argue "we may have an NPV of X, but we still need to do it anyway".

60. **GS – I see. What is the case there? I mean, using specific methods just like what you referred to Payback and NPV and so on. What's the dynamics there? You said, we may just have an NPV of X, which might be lower than what is centrally required but we still going ahead; how is the decision shaped in these cases?**
61. CG – I think, well, they're at board level; in terms of, if it seems to be a business priority, in various levels that it goes through – we certainly have got our executive office here, which would be the first stage. Any kind of project would have to be presented to the executive board and who include change management and credit & risk, marketing, operations, finance, IT director; and the next stage would be going to the TPF joint board, which consists of board members in Tesco and board members of the Royal Bank; and then the next stage after is that if it's deemed necessary, to go back to the Tesco board and back to RBS board; I think in reality it depends from project to project; and obviously they've got budgets that they're working to, they can prioritise and see what is sort of happening in each department for the next five years.
62. **GS – So, is it a formal process, or would you say it's more of an informal one?**
63. CG – I'd say there is a formal process in place.
64. **GS – So, what you're saying is that basically what they do is that they somehow weigh the strategic value of the project and sometimes, regardless some financial disbenefits, they go for it.**
65. CG – Yes. It depends on the overall benefit of the project; it really just depends from project to project.
66. **GS – Right. Regarding the actual techniques for doing that, as far as I am aware, there should be something like a CBA in the beginning, followed by some kind of financial evaluation. Is there a separation between the identification of costs and benefits and their evaluation? Are these two seen as separate?**
67. CG – These would be two separate pieces of work that would be presented at the same time; that would be the first level and you're expected to have that at any sort of executive meeting. And then the financial director might say "oh well, I think you need to include this as well", operations would say, "I think you too should include this as well"; maybe a bit about pre-positioning other people within other areas of the business.
68. **GS – So, in that sense, is there some kind of feedback loop between the group that identified costs and benefits and the group that evaluated them?**
69. CG – It's "go back and then come back in two weeks with this. We're happy about doing this or doing that but we need reconsider this".
70. **GS – Is there a case of "this is going to cost us too much"...**
71. CG - ...if they can do it for 5m instead of 10m. I think again it will depend on the project; some of it might be "well, this is what we can do for X; what can we do about it for Y?".
72. **GS – There are actually a large number of methods – at the moment I've seen them in the literature; I don't know if anyone is using them – which are trying to joint the finance and the strategy functions together; is that something**



that you are looking into? I mean integrating methods, or would you prefer to stick to what you already have? For example, there is – I don't know if you've heard of it – the ROV, which is actually an evaluation method based on options pricing models and so on, which actually provides tangible values to strategic options and this kind of thing.

73. CG – I'm probably not the best person to answer that; I wouldn't know.
74. **GS – In terms of what you know, would you say that TPF is happy with the way that things are done, or is it something that you're doing research on?**
75. CG – It's nothing we're doing any research on; although I can see in this project that I talked about previously, when it's launched, it's the kind of thing you might research going forward. Just as part of the learning process, and in terms of future development basis.
76. **GS – Alright. Let me now move on to intangibles; there are things that traditionally we haven't been able to measure; what I wanted to ask is whether there is an approach within TPF to effectively attach – not necessary monetary – values to things like customer satisfaction, trust, systems rationalisation as I mentioned; in several cases, the cases of banks for example, there are things like the rationalisation of layout or quality of work, security and all these things.**
77. CG – We do a huge piece of qualitative research every year, which is just the TPF brand research. And it's a huge project; we probably interviewed about 20 focus groups of about 20 people, and that looks at the brand as a whole; and I think, within each different product and within the Internet team as well, we do do specifics of qualitative and quantitative research throughout the year. We've also got a customer service department which are constantly doing research with customers on telephone and all sorts...well it's all done on telephone; and they treat Clubcard as the customer service entry to Tesco; and they use it to do all different kinds of research in terms of our service; try and measure value, try and measure customer service.
78. **GS – Is this something that you measure separately about, for example, the Internet channel?**
79. CG – At the Internet at the moment, if you visit the Tesco.com finance website, they're doing online research; I think it's like every tenth person who visits the site gets a popup box and they ask them to do some research; they recently changed the navigation through the site, so it's something we are constantly looking at and trying to evaluate if we can.
80. **GS – Right. Regarding other things like security or customer recruitment for example; there is one big issue with banks, which are doing research on their online channel and what they find difficult to measure is (of course I think this doesn't exist in TPF) cannibalisation; people moving into online accounts from existing products of the bank and so on. Are somehow these types of things being [measured]?**
81. CG – There's nothing specific as that, that I am aware of; as I said, we're constantly doing all kinds of core research; it could be in the pipelines {laugh}...
82. **GS – I wanted finally to talk a bit about knowledge management. As you said, and as I find out from what I read, Tesco is highly customer based and customer value oriented. In the company, how does this information and**

**ultimately knowledge about customers is being used in the process of designing the products? Designing the website, access to it, and so on.**

83. CG – Obviously we're being quite careful for specific information due to data protection issues; and the Clubcard database, which has about 8m customers on there, is all segmented; because people get the Clubcard from Tesco, and Tesco segment it on food. So it's what kind of foods you buy; so they never actually ask them to list their date of birth, so all the data they have is based on age bands. If you got the Clubcard in 1995, you tick the box and you could be anything between 25 and 31, and we don't know now if you're 31 or you're 36, or if you've got children how old they are; so I guess the reason that TPF works is that Tesco people are very sort of Tesco value and customer orientated, and our marketing director has come from Tesco, and we like to think we know a lot about our customers; so, all our customers are segmented into different Tesco segments if you like; being similar in terms of age bands. We've got young families, older families, empty-nesters, older adults who could be pensioners, then we've got the different types of lifestyle segments, so, what kind of food they're purchasing and that kind of thing' so, a lot of that has been used in terms of developing products going forward; and we got to the stage now, where we actually establish the customer insight unit within TPF; we try to segment our customers in a sort of TPF customer segmentation, because if you buy lots of organic food, what kind of TPF product are you going to buy? We have people looking at that; it's a huge project which kicked off recently. And a new department just, sort of, started off a couple of months ago. So, rather than new sort of financial modelling or anything like that, we tend to use our own sort of segmentation process.
84. **GS – There was one last think I would like to ask about; account aggregators. What is your view on account aggregators and do you see it going forward? Is it something that TPF is looking into? In terms of Tesco being customer value based organisation and having established a financial products relation with customers, account aggregation can well be something that may be valuable; do what Egg did for example. What's your opinion on that? And I am talking about acting as an intermediary for someone to manage all of their bank accounts, irrespective of which bank they have accounts in, from one screen. This is what Egg Money Manager is offering; this is what Citibank was offering as well.**
85. CG – I think, ultimately, the single customer view project, that was the idea to do it just within the TPF spectrum of products; and I think this is the same as what Egg do; you can only access your products. Are you talking about bringing other parties?
86. **GS – Yes.**
87. CG – I think it's something we did look at. But it will be very difficult for us to do, because of the nature of the company that we are. It might be easier if we had a current account, because this is the big thing to draw people in; we don't have a current account and currently have no plans to offer a current account; so, it would be very difficult for us to buy in that information and set up a kind of money management; we're not a broker. I know that's something that Virgin looked at and developed; and Egg; but I think you have to have the current account functionality to sort of finish off the umbrella.
88. **GS – Do you see it as something that will happen? Something that will prevail? For example, in the States, it's actually part of life now. Do you see that happening in the UK?**

89. CG – I think it depends. Well, yes, I've got a Virgin One account that takes all my eggs in one basket I guess. I think it's always human nature that we want to see if there's anything else extra; the whole idea in Virgin One is that it brings all things in Virgin; but I still have a Tesco credit card. It's probably moving more in that way; I can't see it happening in the next 5 years.
90. **GS – Right. As a non-bank, how do you deal with the lack of physical contact for the financial products? I mean the lack of branches.**
91. CG – We did *have* branches in store; we had 6 branches; and the research that we do, customers would also like to see a branch, but we know from our own experience that they don't use it; and a lot of banks reduced their [the branches'] functionality as well; I think the way that it's going is that more and more actual banks closing down and we do a lot of work to make sure that our telephone operators and customer services go on, and I think the Internet is changing all that; so, I don't think that necessarily puts us at disadvantage; although we know from research that our customers always say "it would be nice if". But we know that when we did it, they don't use it. It's almost like the security that you know that they're there to go if something does go wrong; there's actually someone to go and speak to face-to-face. So, it's not that we wouldn't develop that; it's the whole ethos of TPF, and the reason we're successful is that if you offer better value for money because of the low acquisition costs which comes with not having any branches; I think you have to be aware of who your target audience are; obviously you can't satisfy everybody.
92. **GS – I see. Speaking of call centres, are call centres something you had before TPF was launched? Or was it developed for that purpose?**
93. CG – Basically, all the call centres that we have are existing; they're not specific; everybody thinks, like customers, "are they Tesco call centres?" but they're not; they're just a separate area of Royal Bank call centres; Tesco had a customer service call centre previously, and that was down in Cheshunt – the Tesco head office; then moved to Dundee about 6-7 years ago; and that's dedicated to just customer service and they just deal constantly with customer requests and customer queries, customer complaints. So, Tesco had experience of managing call centres and we do have a few kind of overflow call centres which are specifically for TPF but the majority of them are just designated areas within the Royal Bank call centres; It's RBS operations but they're being employed by TPF, so although it's in a big building where all the credit card related calls reach to, the person who answers the calls will only deal with TPF calls. But they may originally come from the Royal Bank side, like Royal Bank Advanta.
94. **GS – Right. What I was about to ask you there is once the TPF online products were launched, was there a case for alterations or retraining of Tesco staff for manning these call centres?**
95. CG – The only thing specific to the website was that we have a savings Tesco online banking product; a savings account. And we have a specific number just for online banking and they were all trained specifically for that reason; they were trained specifically for that reason; so they're trained upon the website and the functionality of how it works and what complaints people may have, rather than just a normal savings query; but in terms of servicing, their training is specific to products – I'm just trying to think in terms of functionality, if there's any pop-up box, if there's any technical issues rather than product issues; I don't think there is. I think they more tend to be more product-orientated rather than the technical side; I can see that changing over time; we would expect them to be able to deal with any complaints from customers, be able to resolve any issues.

96. **GS – Right. This is more or less what I wanted to ask you. Some final things I'd like to raise; first of all, is there any kind of documentation that you can provide to me, without it being confidential, particularly in terms of general guidelines regarding the investment appraisal issues.**
97. CG – I don't know, but I can certainly find out if there's anything that we have; the problem is that they all may be working documents and have numbers and they're confidential.
98. **GS – Yes I know. Of course, anything that you may give me, I assure you will be treated as confidential in that sense.**
99. CG – And this is specifically for online? They'll probably be templates and things that we use and they might be beneficial.
100. **GS – Well yes, online is what I'm interested in but as you said, they're not necessarily treated as a separate thing. It's more related to IT rather than specific to online.**
101. CG – I can check for you and let you know. There will certainly be a few things I can email to you, which may or may not be useful.
102. **GS – Yes that would be great. Is there anyone in TPF that you would recommend I speak to, regarding the financial appraisal, the evaluation process, the implementation process.**
103. CG – There was someone else actually who was doing the MBA and who's about to graduate; It's Jonathan Midgley and he actually sits on the credit and risk department. He's in the sort of general credit and risk rather than specialised towards IT.
104. **GS – I think speaking to him would be of some significant value; one of the things I'm looking into is - speaking of the financial aspects – things like the treatment of risk and uncertainty in other IT projects as well; that would be a very good contact; what I can do is that I can send you an email and just remind you about that, and if you can check for any documentation – even anything where you can just delete the numbers from.**
105. CG – I'm sure there will be a few templates, where I can just delete any detail.
106. **GS – That would be great; I'm not looking for details of that kind. I'm looking into processes.**
107. CG – I hope that this helps anyway.
108. **GS – Yes absolutely. As I said, I'm not looking for high level of detail; I deal more with practices and perceptions; and these are sometimes more valuable than details. So the answer is yes, you have been very helpful. Thank you very much.**



## 7.2. Interview, 13/02/2003

1. **GS – Let me just start by telling you a few things about my background and then we can move on to discuss several issues; you told me over the phone that you're in Credit Scoring and that you don't have anything to do with investment appraisal. Now, my background is in Electronic Engineering; I did that in Greece, which is where I come from; I worked there for a couple of years in networks administration; I specialised in Telecoms. I did the MBA here just like you did...**
2. **JM – Well, my first degree was in Electrical and Electronic Engineering as well, and then before I did the MBA I'm in Finance ever since I graduated.**
3. **GS – Right. What I am doing now is this PhD; the main subject is Technology Management and so I am looking at things from that perspective. Specifically I am looking into the ways that established banks or new entrants in Internet banking are appraising their investments in e-banking and IT in general. What makes this quite fascinating is, one, that it is notoriously difficult to quantify several of the aspects related to IT and mainly related to things that have to do with the Internet and so on; in general, one of the main aspects that I am interested in are the cross effects, if you like, of IT and e-banking to spreading across the organisation. SO, that's where I come from. Would you like to tell me a few things about your own background?**
4. **JM – I've been involved in the sort of Credit Scoring aspects in credit risk back to 1994; I started off in the mail order industry and then joined mainstream banking in 1997 with RBS Advanta where I was in fraud prevention and fraud minimisation. That company was bought out by the Royal Bank and so I moved into Application Risk, which is about who do you take-on, and once you've taken them on, what sort of credit do you give them; and making sure you feed back your experience with the customers back to the application processing function. And I was responsible for the platform and the policy and the implementation. Whilst I was there, and we are talking about probably the early days of Internet banking, using the Internet channel as a means to recruit people; so I have direct experience of the Internet impacting on application processing there. Two years ago I moved from RBS to TPF and I have the full remit for Credit and Risk for the credit card portfolio which is Visa and Mastercard; so, I report to the Risk Director but I am responsible for the acquisition policy, the fraud policy and the account management policy relating to risk. The Internet channel is used for recruiting but it is not intelligent in any sort of way, and I have been on periphery of these decisions regarding how we use the Internet but I have direct experience of the initial phases of getting involved in the Internet from the RBS experience. I could happily talk about that and give my views on that. Going back a bit further, the type of mail order that I was involved was the class of sub-prime under-served market, the people at the lower end of the socio-economic scale. And if you think 'does this mail order get involved with the Internet?', well no, because that type of customers don't have PCs; in hindsight, it's an opportunity that you miss because the mail order now can work for the company, a large organisation with a distribution network etc. They are the means for doing the fulfilment side of the Internet and I think they've laterally got involved in that; but they could have been a leader.**
5. **GS – You said you were involved in the implementation with the Royal Bank credit card processing. What I was actually interested there is mainly, and in terms of your experience in the credit scoring area as well, what were the perceptions about what the Internet could do back then? And how have these changed over time?**

6. JM – Putting it in a timeline, I would say it was back in the beginning of 1999 and the main channels that were being used for credit card recruitment was direct mail and there was a branch relationship as well which was coming through; but then there was general press advertising to stimulate interest and get people phoning up for application forms. A view from my position was that there was no Internet strategy and it was from Marketing and the Exec. that “we definitely needed to have an Internet presence. Just give us it. It doesn’t have to be smart or all-singing, all-dancing; just get us a presence!” So, first of all, you’ve got a web page that says ‘Natwest’ or ‘Royal Bank Credit Cards’ and if you were to apply for a credit card, ‘Phone this number and we will send you an application form’. So it was like that; then it moved on to ‘Right; we would like to be able to take applications over the Internet’. Again it was about making a quick and dirty job, get a process going and it was all like ‘I know this guy who has a small company and can do xyz for us’, and it was literally sticking plaster and strain approach to bend what is this application process for mail order, which works perfectly because there is no interaction with the applicant; it’s just discrete stages: you get the application form, you fill it in, you put it in the post. Now someone will key in the application, see what the decision is, and say ‘what can I do next? I can do this or that next’ and they could work through the process. With the Internet, it wasn’t like that because people would like to get {an instant response}... it was just a dumb process really; you submitted the application; you didn’t know whether you’ve been accepted; you didn’t know what was going on. And that’s very much where I would say the Royal Bank is currently. The Royal Bank has developed 3 credit card processes for taking applications over the Internet. And I would say the most advanced one is still crude.
7. **GS – Did you take on the experience from the mail order side into moving things into the Internet?**
8. JM – No. I would say my mail order experience really didn’t come into credit cards; it’s the credit scoring I am involved in. I know the terminology and the technologies but that’s where it really ends. It was basically ‘here’s the application processing platform over here; here’s the Internet. Is there a way that we can integrate the two things together, such that you can go online, type in your name and address and a few details you need, and potentially you may get an answer out’. As I said, there is 3 processes or platforms that the Royal Bank has, in the crudest of which you put your details in - no decision is actually made – and you have the option of either printing it off and sending it in, so there really isn’t much more benefit added...
9. **GS – It’s just a tool for providing the application without spending money on envelopes and postage.**
10. JM – Yes, that’s correct. Now, you can print that off or you can press the ‘Submit’ button and, rather than putting it in the post, it automatically gets transferred to the Credit Card centre for processing. So, they’ll key it, they’ll take your details and then they will get a decision; they’ll work on the referrals and they will come back with a decision. But again, you still need a signature at the bottom of the credit agreement. So, that’s the crudest version; and there are two other versions, which are fairly similar in what they do; and they do fire back decisions to the customer, but it’s very crude. It either says ‘you’ve been accepted’ or it comes back with no decision. You know, there’s still this mentality about giving automatic declines online. But again it is not a sleek process. That is currently available within the Royal Bank, but it hasn’t been created in such a way that will allow Royal Bank joint ventures to exploit the technology. The Royal Bank has all sorts of joint venturing arrangements, hence why TPF exists. And Natwest had their own joint venture arrangements with other companies. A lot of the processes within the Royal Bank are created or allow adaptation for all those joint ventures. And it is one thing the web, the design of the Internet process, didn’t. There was no ‘white

labelling' I think is the terminology they use. So, for instance, Tesco are back in stage one.

11. **GS – Right. Just to move on into your experience with credit scoring and speak about IT on that side; and actually again the main contingencies related to your job, relating to the systems and all the IT infrastructure that comes in place, relating to e-banking to CRM or whatever. How have these things changed the way you do your work?**
12. JM – Probably I will disappoint you here, but I would say, because I work for a joint venture, my role was not too involved in designing the infrastructure. I would be pressuring to get the infrastructure do what I wanted it to do, but I work for TPF; if I wanted the platform and the processes to do such and such, I would have to go to the Royal Bank and persuade them to do it. The Royal Bank has their own infrastructure; there's an equivalent of me within the Royal Bank who has responsibility for the same things as I do, Risk Policy and Management. Now, within this person's remit will also be architecture or infrastructure. Because of the Credit Risk system, they have to make sure that it evolves as the world evolves. So, that will be a person who will be looking at 'how do we modify the application processing platform to meet the needs of the Internet?' And we use a supplier called Experian, a credit bureau. They are providing infrastructure and data sources specifically to enable people to do application processing online. So my equivalent at the Royal Bank will be looking to see whether they can adapt their application-processing platform to take these other data sources. Now, my spin in that Internet side is that it is a channel and we recruit people through it or we can track applications back to their original source. So if this person came from the Internet, we know that the Internet process isn't wonderful but we know that the main source of that person was the Internet, and to me that is a characteristic that I can label certain people with. Likewise I can label on other aspects; myself, I applied on a direct mail application form. Plus there's all the other characteristics, which go with each individual, such as the credit bureau data, application data and so on. However, I also am aware that these people do form a different population and will perform differently. So when it comes to adapting the Risk Policy, it is other criteria that I will be looking at. From a model building perspective, we may have exactly the same characteristics, however the difference between you and me is that you apply on the Internet and I apply via direct mail. If our characteristics are exactly the same apart from that one, then that should do it. We may perform completely different, because we're different people; however, if you took a group of people, the difference might be that people who apply on the Internet expect a different service and they have a different risk profile, even though all the other characteristics are exactly the same. So, that is something that I will research and review on a periodic basis when I look to adapting the credit policy. And as Tesco have a greater presence on the Internet, create an impact on the Internet, I will have to adjust it; a lot of our applications come through store or direct mail. Now, that will change; Internet will be a bigger part, so it has to be built into how the credit policy changes. When it comes to servicing, Internet banking doesn't really exist; it's mainly application processing at the present moment. Now, what you will really like is for a cardholder to go online and check the balance.
13. **GS – What I was actually talking about there was that, in forming your everyday tasks and doing the credit scoring processes and so on, you will be using IT in one form or another, be it software, or be it the centralised system. I take it that this software or system has some impact in the way that you do your job, in the sense that there are several automated processes for approving or rejecting. That was my question about IT there.**
14. JM – OK. The IT we use is outsourced; the application processing system we use is called AutoScore SM, which is a proprietary package acquired from Experian; so



that does all that you imagine application processing does. Application input, where you put all the details in, it goes away to the Bureaus; the Bureaus then key the credit reference data back, CCJs, public records etc. It collates all that together and then puts them through a scoring engine, so it goes through numerous scorecards, it goes through a credit allocation process and through the Policy Rules, and it pops a decision at the bottom, which is 'Accept', 'Decline' or 'Refer'. And then it becomes a queue management system for all your referrals.

15. **GS – Regarding the reviewing process and the scoring system and the way that these scores are awarded to the customer, then again you have a central system which you update; it's like a black box: you put your numbers in the system and it says 'Accept' or 'Reject' or whatever.**
16. JM – I would say it's a black box from the point of view of the operators who do the data entry. Now, the actual internal mechanics, I know that I can put my hand on and say 'George you got declined because...' and I can actually give you an exact definition of the reason; because I know the policies and I know the coding of the scorecard and what the policy rules are and I can get the raw data. Now, my responsibility with TPF is defining what the policy is and what fits into the black box. My colleague within Royal Bank has the same responsibility for the Royal Bank portfolio, which is the policy. But he also has a responsibility to make sure that the platform meets the ongoing requirements of the companies and the joint ventures. And this is what I said before: that this black box and the policy, I have to make sure is appropriate for the people who are being recruited. This black box, as you called it, is just an assessment process. It comes up with the risk: high risk, low risk and then these grey scales in the middle, and the other part of the policy is 'at what point the risk becomes acceptable or unacceptable from a profitability point of view?' And that is my part.
17. **GS – So, you're actually hands-on regarding applying the policy and adapting the system.**
18. JM – I would say defining and adapting the policy. On implementation, I will write an email and say 'this is the scorecard' or 'this is the policy' and it goes to somebody else and they code it up. But you see, my colleague within the Royal Bank would be responsible for doing that. But my responsibility is to make sure that the policy meets the ongoing requirements of the business, and obviously as the population changes and shifts, you can say that the Internet channel is just like saying 'What would happen if we went into a recession tomorrow?' The policy has to adapt to meet the current or the future circumstances of the business; so if you have a recession, you have to start to adapt things. If you have changes in the applicant populations or channels then again you have to adapt things.
19. **GS – OK. Now regarding the process of decision making on various IT projects – and I'm speaking specifically about Internet banking projects – back in the Royal Bank or when the systems were designed for TPF, was there, from what you are aware of, some form of input from your department to the implementers of the system at all? Was there any feedback loop there, or was it just something that was defined and went on?**
20. JM – It was more a bolt-on, front-end process; my involvement, and I go back a number of years, they were forced to get a presence and there was no expenditure on making sure that that you optimise credit risk policy or that you've got this extra data source; it was very much down on a shoestring and just bolt on a front-end to the process. And that's why there isn't what is classed as 'Sales and Servicing' for the Internet for the credit card business.



21. **GS – So it was seen as a separate process to fit into the business? Where I am leading this is that when any IT project is implemented, there is, especially in the Royal Bank where I've been speaking to some people there, a Post-Implementation Review (PIR) where what people should be trying to do there is identify *where* they had such and such costs or benefits. So, my question is actually whether, from your experience, you have seen something like that in your department when systems were implemented. Have your people been asked at all, after the implementation, how they've seen – for example – this new system impacting on your activities?**
22. JM – The project was seen as a 'necessary evil'. We had to get a presence; we had to be able to get applications online. I wouldn't say it was the most coherent strategy to follow. So, there wasn't this kind of PIRs. I would say that these things have probably moved on because I know we are in the process of re-evaluating it. You know, it's like "I'm a stakeholder here, so keep me involved". So I can see that the whole process is being managed in a more professional manner. I would say it was done amateurishly but the key business driver was just to get a presence; if that's all you want then we can give you a presence but we can promise it is going to be crude! But I would say it has moved on now. I would have to check, but there is somebody responsible for the Internet Strategy within TPF who can actually take you through probably from an IT perspective and how it is managed. I could check back; she would be willing to speak. She wouldn't be able to speak about the risk aspects but she could talk about 'this is our strategy and this is the investment appraisal process which is currently going on'. She is responsible for the Internet development.
23. **GS – That would be actually very useful if I could talk to her.**
24. JM - What I'll do is that I speak to her and mention you've spoken to me and I may email the name on again.
25. **GS – Right, thank you. Regarding now the Internet channel but also things like CRM systems and regarding all the information that you get from all these systems, how have you seen them impacting on the quality of information that you get about people you're trying to assess in terms of credit and risk?**
26. JM – It is very much a silo mentality; I work on a credit card portfolio and I would say that the Royal Bank was very much built up on a product base; so when I work for the Royal Bank, I work for RBS Credit Cards and there's the Retail Bank, which is a separate division and they're responsible for loans and current accounts. They are distinct; you know, I could have a Royal Bank current account and I could have a Royal Bank credit card and there wasn't that much integration between the two and they're starting to bring them together. Now, that is happening irrespective of the Internet, so therefore, the objective was really to be able to have consistent decision-making so if you went into a branch and you applied for a loan and they gave you 5K pounds, then you, say, apply for a credit card, then you might get declined and say 'last minute you gave me a loan for 5K, but you're not giving me a credit card for 5K'. So these things are happening, not because of the Internet, but because I am just the same person who may default in a loan or default on a credit card. From the customer's perspective, it's actually the same, so you have to make sure that you've got a *customer* review, rather than a *product* review. So you understand where I'm driving this.
27. There were natural reasons to try and integrate the Royal Bank credit card business with the loans business in a single customer view. Within TPF, you have exactly the same. TPF have 14 different products. The ones, which are probably most closely assimilated, is loans, credit cards, savings and the insurance-based products. And again provider for the loans is Royal Bank Retail, the one for the

credit cards is RBS Cards and the one for insurance is Green Flag. So we have 3 different divisions – or companies as well – 3 different systems and 3 different views of the same customer. But they're treated in 3 different ways; so within TPF there has been an ongoing project for a number of years to develop a database, now it's called Single Customer View, so it takes the data from the 3 different databases, amalgamates it together and hopefully JM who has 3 different products is treated as one customer. So, there are initiatives trying to exploit that single view now and that process is going on. I'm trying to exploit that data within the credit card process, and the benefit really comes with people who have got cross-product holdings, but the cross-product holding level is very very low but it's no worse than the industry average. So, true customer relationship marketing does exist, because there isn't a huge percentage with a cross-product holding that you need to sort of develop the Account Management Systems; however, where that sort of data is being used is on the mailing side of the business. So, it is not exploiting the Internet but it is the case that we've got these customers on the credit card portfolio, who we know they don't have a loan. Let's try and cross-sell them a loan, or we have these people who have a credit card and a loan, we know that they don't have insurance, so we would try to sell them insurance. My dissertation from the MBA was looking at using this data and seeing whether the risk associated with a loan or a credit card any sort of predictor for insurance loss and vice versa. But for the actual customer relationship marketing that sort data isn't used and it has not been built into the application-processing platform, and it has not been built into the sort of Account Management process for credit cards. But the database does exist and it *has* been used to try and find nuggets or populations of people where you can market the products to. But again, how has the Internet impacted on this, I don't know.

28. **GS – Moving to the investment appraisal side of things, is there a process in place to take account of all these things?**
29. JM – Well, this database costs hundreds of thousands and there were large numbers of staff involved; thank God I wasn't involved because I think it became quite heated. So, yes, there would have been a huge investment appraisal. Now, this other name I will give you would be able to give you a better stir, because she was much more involved in the Single Customer View. I was fairly fortunate not having been involved in that investment appraisal.
30. **GS – From what you have seen or what you have heard, what have you seen the role of the Finance function to be there? In several cases, you get different organisational views, if you like, where you get a silo approach where people see it as 'OK, let's get this project through; we have the Business Case, and then that goes through Finance and if it gets stuck there, it has to go back' and then it has to go through other functions linearly.**
31. JM – No, certainly within TPF there is a Customer Plan; there is an appraisal process to get things put on a plan and there would be measures like 'what is the ROI? What is the benefit of doing the project XYZ?' Then the budget would be allocated and resource would be allocated to it. Now, when something is as big as that, with the amount of money that was spent on it, that went up to TPF Board level and that is made up from 3 Directors from the Royal Bank, 3 Directors from Tesco. So, it's not just like some small office. You do have TL at that sort of level; obviously he's in the Board. So, Single Customer View probably did cost quite a bit and it had Executive approval; that's why when it was delayed, it was quite political. But on related projects, on which I spent quite a bit of money without actually going through an investment appraisal process, it was seen as 'we must do it' and it was this kind of quick and dirty things and there will be benefits; we will save quite a bit of money but I have no authority to sign contracts. Effectively

Directors have, but not me. It is small beer when it comes to 20-30K. It's just 'let's do that'. If the CEO knows you're doing it, it is alright to do it.

32. **GS – In terms of again the processes regarding the investment appraisal, there were two aspects I wanted to discuss. One is the process of decision making, which has to do with putting the proposal forward and taking the overall decision; again, speaking of the role of the Finance function, there is this contention that it is more persuasion rather than evaluation that Finance does. Like, for example, one of the things that becomes apparent by speaking to people in the banking industry is that sometimes, the financial aspect – the number-crunching bit – becomes a way for persuading the board that this or that project should go forward, rather than playing the pure role of plainly evaluating a project. What I am saying is that this thing becomes more and more political; is this something that you could go by?**
33. **JM – I would probably agree with that statement. I'm involved in investment appraisal for product propositions rather than infrastructure, and the Finance function play their part in building a financial model to say 'is this proposition profitable or not?' Now, they will build up the model, which would say 'here are all the factors, financial projections plus the profit-loss account for the proposition'. Elements of that model then have to be established, justified, as well as all the assumptions that go with it. Now, with a credit card product, one of the lines within that is bad debt, because it is a risk product. They come to me and say 'what is your expectation for bad debt for that product? What's your justification for that figure?' Finance would certainly build the model, but the ownership of different elements on that model and all the assumptions that go with it, will be delegated to the areas. So the Credit Risk lines go to me, some of the market proposition stuff, balances etc., how much interest we think we'll get and so on, these will go to Marketing and they will have to come up with justifications. And then 'does the project hold water?' 'When does it break even?' 'What's the return on equity?' Finance will be doing the number crunching, they build the model but the ownership of elements within that model will be outside to the ones responsible for the different areas. And then there will be the project sponsor who picks up overall responsibility for the PLA or the P&L projections. And then that has to be proposed to the decision-making body; more often than not this is the Board. It may be an Executive Committee. What Finance do is to be mainly a facilitator. The Finance Director will come and say 'I'm not happy with those figures; let's do some sensitivity analysis; we're a bank so we have equity capital at risk here, so what's the impact of that on our minimum capital requirements?' which is a very important thing for banks. IT infrastructure probably doesn't have much impact on that, but new product propositions and new markets do. Just because the product is profitable, it doesn't necessarily mean that the project will go because it might absorb an excessive amount of capital. This last one, the FD would come in again, but yes there is an official process to going through. Now, some projects get done because it is political.**
34. **GS – The other thing is, you said you've been involved in investment appraisal but this was not for IT projects, but new product propositions. Is there any account from intangibles there at all? I mean in the sense of quantifying intangibles or just assigning some positive or negative values to them?**
35. **JM – You mean like reputation or 'we need to be in that market' type of thing?**
36. **GS – I mean, things like, in IT when you're building a system then you have some sort of rationalisation of the whole system, and this is an intangible benefit, because it affects the organisation throughout but there is no real value that you can actually attach there directly. For example also, improving**



the quality of work that people in the organisation do is also an intangible benefit; or increasing trust of your customers is also an intangible benefit. It is not directly quantified, but what I am looking at there, is whether banks and FIs in general will go down that path to look into these intangibles and say 'well, we can do something with that, so put it in the investment appraisal process in such and such a way' rather than putting it in the small notes at the financial statements.

37. JM – I would say that projects get done because they make more or less financial sense. But I think the things you're talking about wouldn't win an argument, but however I would think that if something was marginal, somebody would take those factors into account and say 'well, yes it will improve customer feel' and so on. So, "it's breaking even, it's making a small profit, it is within our priorities; what other benefits spring to mind? OK, I think it will fly"; that kind of thinking.
38. **GS – I am more talking about the qualitative vs. quantitative side; what I'm asking actually is whether there is any research or attempt or tendency to bring these into the financials at all? In fact trying to quantify them in one way or another?**
39. JM – I couldn't say one way or the other really on that. Probably I've never had experience on that; but just because I don't have this experience I wouldn't say it just doesn't go on. I just don't know.
40. **GS – Right.**
41. JM – I would say that TPF very much are cherry-picking the products; Tesco are a supermarket and a mass market and they'll try to sell anything if they get a bit of a margin; and the way to get a margin is to sell on bulk and they're very tight with their suppliers. TPF has a range of products. Credit cards is a risky business, where you put a lot of money up and you don't get very much out of it, but we're doing OK. We do loans, but we don't do current accounts; we do savings, but savings is a very marginal business. But people think 'you take balances in; there's not much risk'. There are quite a few products out there, which aren't making a huge return. And TPF are developing a suite of them. Tesco's are having a more affinity-based approach; they talk about 'be good to your customers; you'll get value from them eventually', so they talk about lifetime value. I don't think they go through an investment approach but the banks' approach is very short term; they think about 'put the customer first; if you do that it will come good for you eventually'. Help the old lady with the bag, so they want to offer credit cards and loans that bring people in the store; it's all about that.
42. **GS – One question there is, have you seen at all the prevalence of IT and Internet banking at all facilitating financial innovation in the sense of new products; not strictly financial engineering in the sense of designing a new kind of financial instrument or whatever, but in the sense of developing new product offerings, rather than taking the old ones online.**
43. JM – I can't see a huge benefit of Internet banking from the bank's perspective. But if you bring everything together, you can reduce your overheads and I would say, from a personal perspective, I have more control of my finances because I go home and I pick up my personal emails, I have a quick look at my Internet bank and all the information is there; I don't do much, but I check my balance and a few other things, then I leave and I don't have to speak to anybody, so I'm not picking up costs. But I would say I am far more informed about what is going on with my financials. When it is coming to financial innovation, I think the Royal Bank has gone down the route of allowing people to compose the product they want. I don't revolve on a credit card, so I'm more interested in Air Miles and points, whereas



somebody who revolves on balances is more interested in a low APR, a cheap rate or a nice steady APR and all these things. That is where the Internet can allow you to sort of choose the kind of features you want. Now, obviously the organisation offering this service will set certain constraints; so you can't have points plus a low APR but you can trade the one off for the other. So they make sure they set the parameters so that they make a profit. So that's where I can see innovation occurring and innovation currently is more on the Marketing side as well, where IF and all these companies have the flexible mortgages; how much can our mortgage save, comparing to an existing player: that's where the interaction of the Internet comes into play.

44. You go online, you can play with 'what if' analysis and do scenario planning. That's where the Internet comes in. That's where the Internet and technology can help with product innovation. And in Sales and Servicing, you can, because you can go online and the system knows you, and if the company was a bit subtly clever, it could have done its pre-screening; I think this is where the whole idea of Single Customer View is going, is that you can make a pre-assessment on people based upon the data you have; and you can actually pull the two things together: you've got the database of people, you've got the data, you've got your decision engine and then you've got this delivery process. So, if you go online, I already know the offer that I'm going to offer you, so rather than offer someone the standard APR loan, I can say 'we'll offer you this'. Because again, all banks supply data to the credit bureau, so all banks have access to that data. So, if we went down the credit-scoring route, depending on the applicant population, but they all more or less come up with the same decision on how they're going to treat you or me. Where TPF's competitive strength is, is that they offer 14 different products and they've got an idea over Single Customer View, so therefore they can try and do some modelling and take *that* data to derive their decisions, which other banks may not have. I know fairly well that Scottish Widows have got their own data warehouse to look at their customers; so every bank is doing it, and I would say not every bank is as progressed as they're claiming or as they're confident of; and I know how far Lloyds TSB have linked up their loans and current accounts; if you're an existing customer then they don't have to go and make a decision on whether they'll give you a loan or not; they know that; they've already done that for you. But again, the Internet just speeds up the process a little bit, but linking data together is happening anyway.
45. **GS – OK. I won't hold you for much longer; I just wanted to ask you one more thing: you've said you were involved in investment appraisal regarding products. I was wondering whether there would be any kind of documentation that you can share with me about this process; I mean not numbers or such information but rather processes.**
46. JM – I would say that there isn't because a significant proportion of my time is involved at the present moment, but the experience I've talked about building this profit model, PLA, that is currently going on, so it is looking for further market opportunities. There isn't actually a pro-forma; this is what I'm saying. There are things about doing projects like certain frameworks within Tesco that is called RACIS: responsibilities, accountabilities... I can't remember what the C and the I stand for. So there are all these issues and there are governance issues. It lends to a whole proposal process and Tesco have a customer plan which TPF fit into. Tesco have an ambition to take their financial products wherever they have a store presence. Tesco has initiated a process to work out what was the better method for managing the development of their financial products in foreign countries. And the assessment was to use TPF as an expert knowledge pool; how the product is going to be fulfilled in these foreign countries, that is the responsibility of the team to make that decision. Now, within the UK, the preferred supplier for financial products is the Royal Bank, so, where there's a financial product that the Royal Bank offer as a product, it comes to the Royal Bank.

47. However with the car insurance, Royal Bank don't offer it; however Green Flag Direct Line do; so, they exploit that infrastructure there. But again that is managed and directed from TPF in Edinburgh. Now, there's an international team involved for foreign ventures assessment, so there is a case for 'is there a market opportunity?' So, you're trying to work out "How big is the market in country X? How did it go or develop. If that's the market for that product, how much of that market do you think we could grab if we launched the product? OK. Is that profitable? It appears so; Now, how do we go about launching a product?" There's reporting backwards and forwards; there's an international steering committee or Board, which is made up from people from Royal Bank and people from TPF and people from Tesco. And we are talking senior people. There's a supplier selection process going on and they have to make sure it meets strategic fit and there's no conflict of interest. Whether there is official documentation or pro forma, there isn't. There is this understanding of 'it has to hold water; it has to be profitable; it can't expose us to too much risk and it can't absorb too much capital'.
48. **GS – Right. The last thing I would like to ask you. You mentioned someone who is involved in Internet Strategy and investment appraisal. Would it be possible for you to see if you can get me in contact with this person?**
49. JM – I would prefer for me to actually speak to her first; I've got your contact details. I'll tell her I spoke to you – you've also spoken to CG – and gave you my sort of assessment of investment appraisal; I spoke more about risk rather than investment appraisal.
50. **GS – Please handle it as you see fit. One way or another, my strategy when I am talking to different people within the same organisation is never to tell anyone who I've spoken to or what I've said with them. So, I'm not going to tell her 'JM told me this'. Besides I'm interested to speaking to her as she is involved on the Internet side of things and in investment appraisal. So, there are a lot of different things I'd like to speak about there.**
51. JM – I can see the benefits of the Internet, but it's not a significant part of my job; I just have to be aware of the threats and opportunities, whereas this person, the title indicates her remit is the Internet, so they're far more turned on to things that are Internet –related. If you talk about the architecture, she will be very passionate about it because she wants it. This is my impression, so certainly I will approach her and give an indication whether she's willing to talk.
52. **GS – Right, OK. Thanks very much for your time.**

**8. SOCIETE GENERALE S.A.**

## 8.1. Interview, 25/10/2002

1. **GS – First of all I'd like to tell you a few things about myself, my background, where I come from etc. and then I'd like you to do the same thing; talk about your involvement in e-commerce and so on. So, I am originally an Electronic Engineer; I specialised in Telecoms; I worked in Greece in telecoms for 3 years and then I took an MBA in Edinburgh University.**
2. **KT – When did you do the MBA?**
3. **GS – 1196-97; I think it was 2 years before you did it. So, now I am doing the PhD. Actually the main focus of the PhD is technology management. I am looking into the investment appraisal side of things for appraising technologies and so on. A particular reason for doing this in financial services is that during the 90's technology has been the shaping force behind it. I am investigating particularly Internet banking but also kinds of IT projects that financial institutions and banks deal with. So, that's where I come from. Would you like to say a few things about yourself?**
4. **KT – I've been here with SG for just over 2 years now. After I finished my MBA I came here to London; first I worked for an e-business start-up company for a few months and then I came here to SG to work with their e-business development department. Then I sort of progressed into Technology Strategy; so we work within the Technology department, but we're doing IT and IS Strategy for the business. The business lines have their people; we work with the business lines. We sort of pick up trends and what's new and evaluate technology in that kind of way; basically, in any way we can help them with designing and implementing their strategy. With the e-business chain before, it was, in a way, a similar role; we were sort of between business and IT, but giving advice on, for instance, anything from evaluating e-projects that the bank or the business lines were thinking about implementing, to just evaluating the usability of a website. But that department has been disbanded. That's why I moved over.**
5. **GS – So, you kind of have experience on both, say, SG's systems implementation and SG's investments on other companies' e-commerce operations?**
6. **KT – Well, not other companies, but when I said business lines or businesses, I meant within SG. So, let's say the equities business wants to do a trading platform of whatever, then we would evaluate that. So, it's internal. And there weren't many projects like that, that we did; it was more sort of evaluating. Because, when I joined, most of the current websites or trading platforms were already in place.**
7. **GS – So, would you like to tell me a few more things about the process of evaluating these? You said there were a few such projects. Talk about the most striking one, the most challenging one.**
8. **KT – Let me think; I don't remember any sort of really striking projects {laugh}. When working for the e-business, I remember for instance one project that we evaluated; it had to with like loan syndication website or platform. And they were just looking into it; they wanted our feedback on whether it would be feasible to enter or not, given the market and how it was. So, I was basically reviewing the business proposal and seeing if it would make sense, and we would just give our feedback and our thinking. The process itself was very vague really. Basically, we would receive the document and read it and give our feedback. And in that case our feedback was that we didn't think it would be worth the while; it would not be viable at the time. And then they would just take the feedback and they would**



make their own decisions. It was very much like that, but we worked on putting a process in place. And we have within the technology function a project management office, which is a process to evaluate projects; so it depends on basically cost, man-days required, a few things like that whether it goes to the top level, the executives, or, if it is sort of medium importance, the decisions were taken at a lower level. And we worked on putting the e-business into that process because, when I joined, we were a new function. It hadn't existed before. So we had to go in and be put into the process. So, if a project or a request or idea would come in, usually the way it happens is that it comes from the business lines; someone in a business line thinks 'there's a business requirement from customers or something in the market that someone else is doing'; they'd put together a proposal and then it would go to the project management office and then, if it had something to do with e-business like an online platform or whatever, it would be flagged and would be sent to us, and we would give our feedback.

9. **GS – What are you looking at, at that stage? My experience is that you have the business case in most of the projects initially, and then you have a financial case and then you get the kind of quasi-linear process of proceeding {through different departments}. So where does your team interfere? Is it just after the business case?**
10. KT – Just on the business case. In terms of the financial we would not really comment on, because that is basically with the business line; and whether or not we would think it's going to make money or not or provide value didn't really matter. I mean, we could have had said whatever we wanted but the business line themselves would make the final decision.
11. **GS – Right, I see. Do you see any value at all in doing a more integrated approach to this type of evaluation? Integrated in the sense, for example, examining the viability of a project or a business case may well rely on a number of parameters, which can be strategic, can be financial, marketing, organisational, IT and so on. So, is that kind of integrated approach to take account of all these things something that you do?**
12. KT – Not really. My sort of feeling is that it is coming more into place when the market is going down, and it's tougher out there after the e-business thing burst. They are more conscious about cost, whether it fits the strategy and all these things you mentioned are more taken into account and I know they're working on a new methodology and review process for projects as we speak. But before that, when I joined, someone in the business line thought 'hey, we don't have this; I think it's a great thing; let's do it'.
13. **GS – Do you see this having to do with the overall perceptions of what e-commerce can do, which actually relates to the e-business bubble burst. Do you think what you just said has to do with how people believed the e-thing is, back in 1998 for example, whereas now the argument is actually reversed? Do you think that this is the case?**
14. KT – Maybe a little bit. I think a lot of projects that were sort of underway when I joined here in 2000, they were just because we heard that X investment bank are doing something like that. 'I think we should do it': That was enough to argue for it, often. Maybe I'm a little bit exaggerating, but the rationale was basically that if we don't do it, maybe we're going to lose out. And that was very much the thinking with the e-commerce stuff.
15. **GS – To you see it becoming more rigorous?**

16. KT – Today it's completely different I think; completely. I think they think more sort of strategically; how to position themselves and sort of more focused on cost at the moment. They're cutting down, because only few of the business lines are actually bringing in profits. So, IT suffers; any sort of IT investments.
17. **GS – Would you like to tell me a bit more on the details about what your team are doing when you get a business line proposal?**
18. KT – OK. That was before in the e-business. So that was only in 2000. Last year, that process sort of never got full role or momentum or whatever you can call it. But I would say it was more sort of ad-hoc and giving feedback on various ideas that people had.
19. **GS – Was that based on the team's experience? Was it based on templates?**
20. KT – No, we hardly had any templates; our role was to put those templates in place. We designed the methodology and we put all the templates in place, but at that time, it was decided basically not to put it forward. It was used, I think, a bit but not really; and because there was this project management office, they just decided to maybe take on a little bit the work we've done, and we handed it over to them really. But in terms of the way the bank approaches projects, there are now processes in place; there are templates, but sort of in terms of tracking the benefits, tracking what they gain out of them. They're working on it at the moment. I just met up with someone from project management office a couple of weeks ago, and I've looked at what they're doing; and they are proposing a new sort of system; a new template and methodology to actually evaluate benefits of projects.
21. **GS – That's not really surprising because the more I speak to people, the more I find that this was the approach before quite a long period of time, when e-business was thought to be the main thing to do. You do it or stay out of business.**
22. KT – Exactly. That was the thinking: If the others are doing it, we're doing it.
23. **GS – You've been working for SG for quite a while; from what you have seen, is there a different treatment of IT projects? And we're talking about capital investments. Is there a different treatment for capital investments on IT and capital investments on other capital projects?**
24. KT – I'm afraid I couldn't comment on that. I just wouldn't know. Because I only know how they treat IT projects; to be honest with you, I only have a sort of vague idea. I know how they work a little bit with the IT projects, but they're more based on perception. Yes, I know how the project management office works, but if that is in fact the most accurate picture that I have, I'm not sure. But for other projects, I have no idea. Because we don't get to come close to any other projects. It's not our business.
25. **GS – I see. In terms of the projects that you have been involved in, in the past, in terms of locating costs and benefits, which ones would you say were the most important anticipated benefits and costs, and similarly what were the most unanticipated benefits and costs which came to be real at the end? I mean, for example, when a business unit implements an IT project that goes through the business proposition and then goes to you, and then you say 'well, it's good', and you do some kind of, shall I call it, heuristic evaluation. Your group or the business unit group they say 'well, we expect that the cost of doing it will be that; these are the most important aspects; what are we going to gain from it? We're going to gain that and that'. At the end of the day, until the implementation is complete, you get – and that's typical of any**

**project – different costs, or additional costs, and additional benefits. Have you had any such experience?**

26. KT – I haven't work on too many projects myself; because we're not a project-based function. But I am aware of a lot of the projects that have been going on. And my feeling is that the tendency is to focus more on the cost and whether it is going to be on budget and whether there's going to be additional cost; the requirement is usually from the business or whoever is sponsoring the project that you have your costs outlines, but of course you need to have benefits, whatever they could be, and you have to be able to sort of justify or describe those benefits with numbers. But in terms of following up with the benefits, whether they're realised or whether there are additional benefits, people don't really talk about that. And that's one of the things that they're actually working on; tracking benefits. What benefits were actually achieved and what were the extra benefits. But, for instance, I worked on one major project and it was all about cost.
27. **GS – So, what you're saying is that the justification of the benefits was kind of qualitative.**
28. KT – Yes, very much. Well, the nature of the project that I worked on was very much qualitative, in a way. And the benefits, I would say some of them, were quite obvious; but if you can't say 'OK, it's going to cost X Euros or whatever, and the benefit is going to be Y Euros more than the cost, then that's what they look at. It's just the tangible side; and projects that don't have very strong case in tangible numbers, they tend to sort of {get rejected}, unless it's like you have to do it to meet a certain regulation.
29. **GS – Yes, I know; 'now or never projects' that you have to do to stay in business.**
30. KT – Yes.
31. **GS – Coming back to what you said about the positive NPV side, there is a contention that the nature of IT systems is such that a project may well be giving a negative NPV, however the benefits from it may be important. And I think this is the main reason why companies do treat the NPVs and the financial measures in some kind of prudence, in that they say 'well, it may have a negative NPV but let's take a closer look and see what we can get out of it'. Is that something that holds true?**
32. KT – Yes, well, I'm not sure actually. I think it varies a little bit but I think it tends to be like long term benefits are not what they're after, because the sponsor usually wants benefits *now*. So, if the project is not going to deliver immediate benefits, then no one wants to sponsor it. Because in investment banking people move positions very quickly; so, if you implement a project with benefits in 5 years time, it's not going to make a lot of difference for you. You don't care. It's not going to affect your bonus and you may not even be here. So, I think it is very much cost-benefit today, or as soon as the project is finished – maybe a year later. That's what really 'sells' projects. That's what makes them go forward. Unless it's regulatory etc.
33. **GS – Of course, this is a different thing. When it's something that you have to do, this is a different case of investment appraisal, whereby you are trying to make things cheaper, for example; reduce the costs and the benefit is that you comply with regulations. Is that the case?**
34. KT – You mean like improving processes like cutting down?

35. **GS – I'm talking about any project that's imposed by regulatory regimes; are these cases where the benefits are not looked at, at all?**
36. KT – Yes; I think it's just to comply to regulation and to run the project as efficiently as you can. I've not actually been involved or come across any such project. I mean, I'm aware of a few of them. So, there is probably a business case – well, some of them may not even have a business case. I don't know how they'd be working on it, but I would imagine it's to deliver what is required at a minimum cost.
37. **GS – Right. Regarding the implementation process of such projects, and again from what you know or heard of or have been involved in, has it happened that perceptions about what the technology in question would do changes from conception to completion? Like people believed in the beginning that technology would deliver such and such, and then the orientation, after you gain original knowledge on what it actually delivers, changes. Has that happened in a few or many cases?**
38. KT – I wouldn't know. I've only been involved in projects where you had to educate people about the technology, in terms of that they would think it offered X, but that's more the end users; for instance, we were looking at portal technology and for people, even some of the senior management, they don't really know what it is; and still they would decide to sponsor a project without having a clear picture or understanding of actually what the technology is about. So you would have that kind of cases, where you would have to sort of educate people about it. So maybe for them, they would say yes to your question; it has happened. But from the IT perspective, because we knew what the technology was about, I don't remember any case where you would have a technology and then discover that the benefits were different from what you were expecting. I'm sure there may have been cases, but I'm just not aware of them.
39. **GS – Where I am leading this, is actually the case for... one of the sides there, is knowledge management where experience is gained through a successful or even a failed project, and this accumulates some knowledge about what to do and what not to do. And where I am getting at is the discussion about how this knowledge is being, if you like, captured and codified formally or informally within the organisation.**
40. KT – There is no process in place for it; but I was working in a knowledge management project; and that's what we were looking at. Because there's a lot of projects that are done – quite a few of them fail for various different reasons – but there is no formal process in place to learn from previous projects (successful or not). It's only within the team that succeeded or did not succeed, so they only learn from it and, if they leave, they take the knowledge with them. So, you have a team, maybe here in London, working on something and then a few months later, you may have someone in Paris or New York, working on the same thing, or a similar thing, without even talking to each other or even knowing about each other. Or, for instance – one good example I was working on knowledge management and portal project – and after the first pilot, for cost reasons they decided to stop the project and disbanded the team. There were only 2 people within the bank, myself and another person working on the project, who are still with the bank. Then, people in Paris decided to look at portal technology; would they come thinking to talk to us? No. They wouldn't really know. But only after they've been looking at it for months, someone said 'hey, why don't you talk to these people?' And they did speak to us.
41. **GS – Would you like to tell me a few things about this knowledge management project you've been working on? What you were doing etc.**



42. KT – OK. Honestly I don't know who got the idea or who started the knowledge management project; I think it was within IT, the CEO and people at executive level who thought that KM was useful. When I joined e-business we sort of started looking at knowledge management, first just as a research to find out what it is, and how we could apply it to the bank. And then it turned into a project. My view was a bit different from other people on the project, because I felt knowledge management isn't about technology. Technology is a great way to support knowledge management but KM isn't technology. But other people just wanted to go ahead: 'for KM we need a portal, and we need content management tool, and we need search facilities.' Yes, we need that but that's not necessarily the first step. In my view, it kind of turned into a portal project, and where the aim was to invest in a portal product and try to link everything together; because there were so many different databases, Intranets and legacy systems within the bank. I didn't even know half of them until I started working on that project, because then I had to find out what they were. The idea was to try to bring them all together into one interface; one screen; and to have it personalised to different users, like equities, accounts, whatever. So they have different interfaces and then had to be able to somehow share information between divisions and then across different countries, and within the bank. The idea we had at first was about capturing knowledge about projects, doing lessons learned, doing like an expert directory so that you would have a directory and then say 'OK, I have an idea about knowledge management', and then do a search and find people within the bank who are relevant. That was the original idea but it soon just turned into a portal project.
43. **GS – So actually, what did it end up being used for? Has it been launched?**
44. KT – No. What then happened was that we had a portal pilot, everything was ready to go, but then they decided the cost was too much. So, it was about a year ago now, and they decided to stop it. And now they're sort of launching it again, just as a pure portal project. And now even they're buying portal technology, and I don't know what they're going to do with it.
45. **GS – You see, that's one of the cases we were talking about before, the difference between what you think it will do at the beginning and what it turns out to be at the end. That's one of the major conclusions from many technology case studies.**
46. KT – Yes, we started with a concept, and then the concept just ended being a portal project.
47. **GS – Right. We'll probably come back to knowledge management. I'd now like to speak about the decision-making process, and that's in general about the approval processes and so on. From what you know and your experience, throughout the whole life of the project, which would you describe as the main milestones of approval?**
48. KT – I'm not sure I can answer that, because like I said, we don't really work on a project base, so I'm not sure I could actually know.
49. **GS – Where I am actually leading this, is to discuss the role of the different functions in a project; you know, you have the Strategy function, especially pertinent in IT, you have the Finance function, the Operations, Marketing and so on. What I was mainly interested in, is the role of the Finance function in there, and how it works.**
50. KT – I don't know to be honest. For instance, on the KM project, when we were doing the business case and getting approval and all that, I don't think even the project manager ever spoke to the Finance department. I think it's just on a budget

basis: a budget is allocated to IT and then it's all just allocated down through the management in terms of projects. It's more or less decided by the business – either IT or the business – but the Finance dept, I'm not sure how they fit in.

51. **GS – The next thing I wanted to talk about is, in a sense, the power relations of the different expert groups within the organisation; be it for example project-based or department-based. How would you describe the power relations in such a project? In the overall IT portfolio, how would you describe the power relations between Finance, IT, Marketing, Operations, Banking etc?**
52. KT – That's a tough one; because, for instance, the view is for at least IT projects, if we're working with a business line, like implementing an IT project for them, it's just the business line and IT; well, OK, Operations may also be there, but in terms of the power, the power is with whoever pays, in a way; whoever is sponsoring the project, which is usually the business line.
53. **GS – So, what you're saying is that there is no specific allocation of power to specific functions, or is it the opposite?**
54. KT – Sorry, I'm not sure I understood that.
55. **GS – I am asking whether there is no specific allocation of power, for example, to IT or Finance or Marketing or...**
56. KT – Not really. OK, IT has maybe the power to select whatever technology and propose that; but in terms of working as a project team, or deciding on a project, it is whoever has the money to sponsor it. He's the leader and he can stop the project at any time.
57. **GS – Well, let me give you an example. For instance, if you have an organisation doing an IT project and this organisation works in a way that this linear process of approval goes through, for example, the Finance dept. If they say 'No', there's no way it can go forward. That actually means that the power resides within the Finance function.**
58. KT – Right, I see what you mean. I'm not sure actually how it is. I could look at the project management flow; but if I remember correctly, it just goes to whoever has the control of the budget. Earlier than that, I'm not sure who could stop it.
59. **GS – In terms of the expertise again, within these IT projects, you have the involvement of Marketing people, Finance people, specialists in IT, KM or whatever. Would you say that through the continuous implementation of such projects related to e-commerce (like for instance you started doing that in 1999 and now you have more and more e-commerce projects) is there one expert group among others that is getting more important? Do you think it is financial expertise or IT expertise that gains more importance? In terms of, not evaluating, but actually implementing... or do you think there is a new kind of expertise arising from all that?**
60. KT – None that I've really noticed. I think, probably what has happened with e-business projects is that it's gone from being something that everyone focused on, to something that's being treated as any other project. And I don't think that no one department, or no one area... it's all politics throughout; but e-business being one area being the predominant, I don't think so.
61. **GS – Right. How would you say you see the role of e-commerce or things related to the Internet, for example Internet banking, in giving rise to new**

**types of financial engineering, in the sense of designing new products? Do you see a relation to that?**

62. KT – Well, I would think so, but based on my experience, I can't possibly comment on that, because we've not dealt with any sort of product interface, or providing technology to the customer; except evaluating a few projects a few years ago.
63. **GS – I mean in terms of, you know, what I'm saying is that having the technology at hand, do you see that as an enabling way of designing new financial products?**
64. KT – I think it definitely should be, but whether it is going to actually happen, that's a different thing; because I think there are even projects out there, or Internet sites or platforms of whatever that are offering new ways of presenting or approaching the product; and there the technology has enabled them to do so. But I don't think at the moment that the banks are really focusing on that. Their main focus today is just to get business. But I think Investment Banking is still a bit traditional and, even though they've launched all these new trading platforms for different products, it's not doing much to change them. Because the market is going a step back, hopefully and eventually it will go forward, and e-business, or new ways of using the technology to deliver products or services to the customers, will happen. But at the moment, I think it has gone a step back a little bit. They're not investing and they're not researching or sort of developing that at the moment; that's my sort of feeling. And I know a few platforms that are hibernating; it's out there, but they're not trying to push it anymore; they're not trying to sell it. They're just waiting for the market to pick up, because you need to get the business.
65. **GS – Have you had any involvement with what SG-Hambros is doing?**
66. KT – Not really.
67. **GS – Because I've been looking at them a few days ago and was just watching the demo they have for private e-banking; and I was just wondering whether you had any involvement at all.**
68. KT – No, I think they have their own IT team. We don't deal with them. They run as a separate unit within the bank. But I think private banking is mostly interesting in terms of products and services. Well, it's my personal interest.
69. **GS – I was to ask you things on the investment valuation in the financial terms, but I don't know whether this would be your area. In terms of methodologies used; things like apart from the NPV; I was about to talk about more sophisticated methods and whether you're aware of these things.**
70. KT – It's like again NPV, total cost of ownership, are still the basic ones; but I've been actually looking at other methods, potentially to evaluate investments. Like, if you have, say, 2 technology projects, should you go for this one or this one?
71. **GS – Like the Real Options...**
72. KT – Yes, like a Real Option kind of thing. We actually started looking at... Do you know Giga Information Group?
73. **GS – I don't think so.**
74. KT – They came to us trying to promote and sell this methodology; they've designed it and they call it Total Economic Impact. I did a report on that; and basically what they're proposing is that they put in this element of flexibility, which

is based on Real Options, which is that if, for instance, I choose this technology today, these are the benefits and all that; then in like a year's time, using this technology will then allow me the option of doing another project in the future that will bring me more benefits, whereas the other technology will just answer my requirements today and may be cheaper, but will not deliver anything in the long run.

75. **GS – So, you're actually looking at the Real Options.**

76. KT – Well, we just did it within the Strategy team; to look at it. We thought, first of all for us, the team, to evaluate the technologies that we're looking at. This might have helped us but then I was actually talking to the people in Paris at the project management office, and they were looking at it as well. And then last week, we had a workshop where they were presenting the methodology. I was quite interested, but my view is that it doesn't add much to the normal cost-benefits, in our Total Cost of Ownership method. But the thinking about flexibility or the options, is quite useful; and I think adding the option model on your basic evaluation models, developing some kind of options modes for technology, I think that's definitely something that people would look at in the future. At least there is interest today.

77. **GS – One thing I was looking at in the options approach, as they call it, is that one of the main arguments there is that it gives a positive notion to uncertainty, in the sense that uncertainty is being treated in financial methods as the risk, rather than as something with positive and negative notions. Just as you said before, the option to wait until the market picks up, is something that you could attach a value to. {GS shows the table of methods for IT evaluation}. I just wanted you to take a look at that table and tell me if you recognise any of these methods, which are all developed for IT specific projects.**

78. KT – No, actually not. I may have seen this one; Investment Portfolio, but everything else is new to me. Interesting.

79. **GS – From what I know, there are a host of such methods being developed which are or aren't used. My question there is whether you're looking into implementing something like this.**

80. KT – Well, like I said, at the moment we are looking at it; the project management office is looking at it as well. But not really any specific methods. Like I said, I looked at this model and did a sort of brief research on the basic methodologies like Total Cost of Ownership, ROI, and that kind of stuff, and how they compare. But I think our conclusion is that it is good to look at it to be aware of it, but you need to always apply it to your own company; your own situation. And when we have someone like this company, coming in and offering tools and methodologies – which is great but it doesn't add much value to what we already have. It doesn't justify the cost of buying it. But we've looked at it, yes. You look at things like worst-case scenario, best-case scenario, and your actual facts, so that you can present and say 'OK, after doing this, it should be between this and this; the best and the worst. But the actual is what we're expecting. So, it's some kind of indication.

81. **GS – You said you're looking into what kind of methods you want to implement. The purpose for implementing these methods, is it to get a more accurate measure, or is it to get you thinking about things that you wouldn't have if you were using another method?**

82. KT – No, it is more about getting a more accurate measure. From the business or from IT, the reason that I was asked to start looking at it is, in a way, because a lot



of projects that have been delivered haven't been on target. So, they've started to think 'can we provide our project managers with a tool across the bank that is sort of reliable, or at least gives better indication than what we currently have?' Because the sponsors or the business would be more happy if you say 'OK, it's going to be between this and this, but I'm not quite sure', rather than you always saying 'this is going to be precisely X' and then you're way over it. So, it's just that initially people are looking at different methodologies but I don't see anything major happening in that area in the near future. But I guess this is also triggered a bit from the downturn in the market; and they're more focused on cost. So maybe when they start making loads of money again they will care about this.

83. **GS – Right. There are several intangible aspects again; I have this tendency to speak about intangibles, but these are the ones that happen to be most challenging. Regarding the ways that these are being treated; thinks like, for example, security or trust, or the cost of error, or the rationalisation of the systems – just like you said about this KM project whereby you had to pull together a number of databases and just present them in a different way in each different department – are these things something that you're looking into attaching (not necessarily monetary) values or a benchmark? Or do you think it's just enough to know that they're there?**
84. **KT – I'm not sure, honestly. We don't deal with sort of security etc... I know it's very important and they always have to be informed and involved; we have a team focusing just on that; but we always have to be sort of informed on what is important and has to be followed but gaining value out of it, I don't know. Possibly but I don't know.**
85. **GS – So, you're not looking into attaching a value, positive or negative into, for example, investing 4m instead of 3m in a system that is 5% more secure. This is what I mean by attaching a value. Having a benchmark; for example an answer to the question 'what does it cost us if the possibility of error into our systems is 0.5% instead of 0.1%'?**
86. **KT – I see what you mean. I haven't heard that discussion at all. I haven't come across it, so I wouldn't really be able to comment. I would think it should matter but I couldn't confirm that.**
87. **GS – To finalise, just a few things: First, regarding further contacts to people that I can talk to in SG, SG-Hambros, people who have been involved in these projects from either side: Finance or IT. Would you be able to recommend anyone?**
88. **KT – Possibly, if there is something in specific that you have in mind.**
89. **GS – Well, actually, more or less, I would like to talk about specifics of Internet banking with people who work in SG-Hambros who are actually doing the private e-banking operations. And things there relate to all kinds of aspects like, first of all, the investment appraisal of technologies that they're using, the strategic outlook of the usage of the Internet, again things about the Finance function and how it incorporates with all that; financial engineering, just as I was asking you before, and so on. And similarly, people from, for example, the Finance department, people who participate in approving projects etc.**
90. **KT – I could possibly get you to speak with someone who was working in the project management office, then they would probably know someone, for instance, in the Finance function. I don't know anyone in Finance. But SG-Hambros, I**

actually don't know anyone who works for SG-Hambros but I could possibly dig out any contact. I'll try, because most of the people I know are within IT.

91. **GS – It would be useful to talking to people from IT as well.**
92. KT – Let me think about this and I'll get back to you.
93. **GS – Thanks. The other thing; is there any kind of documentation, that is not confidential, that you would be able to provide? Things like the processes we were talking about; the reviews that you do for different e-commerce projects. Of course, I'm not looking into numbers at all. If there is, for example, something like a template that you're allowed to give me – of course, I'm treating everything confidentially – you could just delete the numbers. I'm not actually looking at the details; I'm looking at processes rather than anything more detailed relating to SG's business. Is there something you could give me?**
94. KT – Possibly; I would have to talk to the project management office because they own it, and see if they're happy with that. But I'll look into it. Templates or processes...
95. **GS – Templates or processes for technology appraisal; technology project approvals or anything that is related, to give me a clearer picture.**
96. KT – I'll see what I can do.
97. **GS – I can actually send you an email or give you a ring to check back.**

9. **CENTRICA PLC.**

## 9.1. Telephone interview, 22/05/2002

1. **GS - Since we haven't had a chance to talk extensively in the past, I would like to start by introducing myself and tell you who I am so that you can understand my background; then we could discuss issues about electronic banking if that's alright with you.**
2. DR - Yes, sure.
3. **GS - My original background is in Computer Engineering. I specialised in telecommunications wireless networks when I took an MSc in Manchester a few years ago, where I did some work for Norweb Communications and the University. I worked for several years in Greece as a network administrator, then I took an MBA in EUMS. Currently, I'm doing my PhD on issues of Investment Appraisal for e-banking. As you can understand, I have an engineering 'descent' and I'm now dealing with aspects of technology implementation in all respects; like financial, strategic, organisational, social and so on; I am particularly fascinated by the banking sector, where technology – as you probably know better than I do – has become one of the key shaping forces. So, this is where I come from.**
4. **Now, would you like to tell me a few things about yourself and your background in e-banking and Goldfish?**
5. DR - Yes. I've trained with Price Waterhouse and then joined British Gas in 1995; I joined the corporate finance M&A team for a couple of years. Then I was made FD in financial services in 1997, which was basically a small financial services division of Centrica, which then was trialing at the time...were running the Goldfish Credit Card – a joint venture with HFC – which was a standalone credit card venture, owned 50-50 between the 2 entities; and also we launched the Goldfish and British Gas insurance business. And then in 1999 we acquired the AA, which brought with it a substantial financial services business, which is AA insurance and financial services; a new joint venture with the Bank of Scotland in terms of retail financial services. Then, in December 2000, I was behind the setting-up of Goldfish Bank, which is a 70-30 joint venture – Centrica owns 70% and Lloyds TSB 30%, to take the credit card bulk, which has been purchased from HFC in the summer of 2000, and develop a wider financial services and retail banking opportunity.
6. **GS - Would you like to tell me a bit more about the history of launching Goldfish Bank and how it evolved towards its current shape;**
7. DR - Well, the current status is that the credit card is going to be transferred over – it's legally owned and ran by Goldfish Bank at the minute – but it's operationally processed by HFC still; that will be transferred over by September-October this year. So the 1.1m cardholders will transfer over operationally in September; there is a contact centre being built (for processing etc.) for those customers at the moment. There's a lot of planning and positioning underway on that. The other big stream work is to launch new products: there's a savings account, which is just being launched to the public, there is a personal loan product, which will be launched probably in June-July this year, and we re-launch and have various other products; we have a Goldfish home insurance product, we have a guaranteed equity bond product which is currently out in the market, and there's a number of trials and product launches going on, in and around; so Goldfish Bank is launched if you like and it is a part of the financial services marketplace; it always has been there by virtue of the credit card, but this is if you like the next stage of the development, which is expanding the range and aggressively growing the card base.



8. **GS - I noticed that you mentioned launching a savings account, a loan product and so on. Is there a current account under way?**
9. DR - We looked at, and spent some money looking at developing a current account last year; although, we pulled back from launching a current account and developing it fully, because of the market conditions. The reality is that, when Goldfish was launched as a joint venture with Lloyds back in December 2000, it envisaged the online channel being a much bigger pile of the game. As it happened, the failure of the pure-play Internet banks to a degree, and the very high servicing and pricing strategy of Internet banks, like Cahoot, Egg etc., has turned us off if you like in terms of competing in that space. Most of our customers – currently the million customers on the credit card – are mainly offline. What we're therefore doing – I guess a good parallel – is a First Direct type of direct bank; certainly initially not focusing into a current account, unlike First Direct which very much launched around that.
10. **GS - Would you say that the decision to develop an Internet bank in the case of Centrica is based on providing a set of integrated financial services to existing card customers – you mentioned 1.1m cardholders, which is a actually a huge customer base – or would you say that it links to a more integrated household services approach?**
11. DR - No, I think the strategy behind Goldfish really is to take that customer base, and take the benefit of Centrica's channels and data; because you know we've got 18m households and data and channels, and use that competitive advantage together with Lloyds' banking expertise and technology, to develop a very compelling direct banking proposition in the marketplace; and that's really about developing multi-channel services, with a very clear service differentiation rather than pure product. As I said, we don't position Goldfish - and never had – as loss leading financial services; we don't play in the same arena as Cahoot, or some of the other pure Internet banks. In other words, our pricing on the savings account is nothing like as aggressive as Cahoot say or Egg. So there is a difference; we do compete in slightly different marketplaces.
12. **GS - I noticed in one of the fairly recent articles in the press, that Egg was actually planning to remove some of the charges for telephone banking that it had on its customers; so it would stop 'pushing' customers to the Internet. I guess that this is the same rationale that you're working on: 'not pushing people to the Internet but using an integrated channel approach'.**
13. DR - A lot of people who are highly 'rate-sensitive' are being very much attracted to Cahoot and Egg and their like, and to get it more stickier and more service-based proposition, they have to cater more to the offline channel; and that is, you know, just a reality of the marketplace nowadays; and that's why Egg is well playing in both fields, in offline and online financial services, because the Egg business model could not survive with pure offline financial services; and that's why we definitely won't go in that airspace for some time.
14. **GS - In the issue of stickiness, retention and sustainable margins, what you're actually saying is that introductory offers are not viewed by Goldfish as [the way forward].**
15. DR - We don't loss-lead. In other words, our proposition and the credit card is all about transparency, it is service-based; we have one of the most awareness brands in the UK, we have fantastic customer service, and we're a loyalty-based proposition, unlike the other cards, which is a fundamental part; it's about rewarding you for the day-to-day essentials; and that's the fit with Centrica because of its British Gas and AA heritage. It does not cut back rates and then

take them back in 6 months time, because what we're about, is being here long-term – building a long-term relationship with the customer.

16. **GS - Coming to the issues of competition in the marketplace, in the field of, let's say, 'alternative channel banking' (I don't want to use just the term Internet banking), let me just go a few years back when the 'e-everything' proposition was establishing the contention that any technology firm which has security and infrastructure-technological capabilities would be able to compete head-to-head with incumbent banks, financial institutions and what I call the 'related entrants'. Do you think that this proposition is still on? What would you consider now to be the viable players in this field?**
17. DR - Is this for pure Internet only?
18. **GS - Not necessarily. As I can understand it, the proposition by Goldfish is an integrated channel approach. Entering the banking service sector through alternative channels from companies that are, let's say, non-banks, financial institutions or do not hold any financial expertise.**
19. DR - Yes I see what you mean: whether these business models still hold true. There's no doubt about it; we've learned an awful lot; in a way, had we got to the market earlier, and launched as an Internet-only bank, I don't think we'd be still here today. And with hindsight, the market changed dramatically. Current accounts and mortgages have become far less attractive to us in market condition terms. And the offline channel has become pretty pivotal and I think the Internet experience of everyone perceiving that it is much much lower cost to acquire, service and retain customers, has been a bit of a fallacy. The costs of setting up and integrating the channels are high. As well, customers in many instances are still very much learning with the online channels etc. and the level of penetration take-up has been difficult. It's difficult to acquire and retain these customers. Without any doubt, we are launching a different business model than we were intending to a couple of years ago. So, in terms of 'is it still viable?', yes, very much. I mean, the margins are very tight, but they're always going to be tight. And the – if you like – core critical success factors that enable you to compete, are still very capital intensive. It is a business that should still deliver long-term shareholder value, which is worth to someone like Centrica, who's a non-bank getting into. Certainly, the marketplace has changed enormously within the last 2 or 3 years.
20. **GS - You mentioned at some point about customers switching providers and so on. I noticed, in one of Datamonitor's reports a few months ago, which was about switching costs in Europe and customers switching their financial service providers; there was a quite large percentage of customers who wanted to change FS providers but didn't do so because, as they said, it was too difficult. Do you think this is true? There is always the contention that the Internet is making switching tremendously easy in a sense. What do you think are the real issues behind these figures?**
21. DR - Well, I think the inertia on current accounts – and what I call the key relational products, like the current account – is still very high. So although [switching] it's increasing – and the problem why it's been so low I think it's been down to inertia amongst the consumers, but also the actions of the big 4 banks to prevent or make it more difficult logistically for you to transfer your current account. I think that's getting better now; government standards and customer service standards are definitely improving, but the current account has been very slow; and the other products, I think, in terms of switching, although they've been very much easier – it's far more easier to set-up savings accounts – what you have is people opening multiple savings accounts across different providers; so they don't necessarily close them, but they just maintain them. And if they [the accounts] are inactive,

there's a cost of inactivity, which is being rising in the marketplace, and all these new banks are claiming a big sign-up from customer targets; but what really drives value is activity. Activity rates. So, if you've got people switching out, that's one problem. But if they're coming to you and they're inactive, or become inactive after a short period of time, that is inherently probably an ongoing processing cost to the organisation and whilst it's an opportunity to re-activate them, these numbers can get quite large. I think in broad terms, a lot of the other products, it's getting a lot easier to transfer them; people are re-mortgaging more than ever, and that sort of thing; but I think the key area around things like the current account, is being very slow; and credit cards are the same: what really is the name of the game is activity; because of your credit card is the one (people on average hold between 3 and 4 credit cards) in people's wallets being used, then that is fundamental to value. But if it's not, and it's inactive, then it can be a cost on the business.

22. **GS - Getting back to general issues on Internet banking, there is the opinion phrased by several researchers and academics, as well as people from the marketplace, that there prevails some sort of decomposition of the banking model to more discrete parts – providers, in a way that is similar to the way that the utilities did, when they were deregulated, into production, distribution and supply. There is also another proposition, which is talking about a segmentation of the customer base, according to net worth. There is a proposition for example that electronic banking - see for example the MLHSBC proposition – is targeted to more high net worth customers, who are actually the ones who are going to be using it, and give sustainable margins to the bank; to the financial institution in general. What is your take on these 2 propositions that I mentioned? The one on the decomposition of the banking model and the other on the segmentation of the customer base to low net worth and high net worth.**
23. **DR -** Well I think, taking the latter actually first, because that's what everyone is now doing; I mean 'one size fits all' just doesn't work anymore; but I think that for people like Goldfish, we are planning on mainstream financial services but we will tailor offers to the customer base (and you know that is part of the customer value strategy model that most players are developing). I think that where you're getting at is more in terms of key areas of focus, like the MLHSBC wealth management sort of arena, is a very untapped resource. But financial services is a market where there is huge cost of innovation and change. Lloyds, as you probably know set up 'Create' wealth management, and they spent a lot of money on that and closed it. In other words, there is a big cost of setting things up that don't drive – particularly for the big players – sufficient volumes; so your business model has to adapt and be robust. Critical mass in financial services is very vital, and you can't play on all fronts. So, if you really want to focus on high value customers with wealth management type of proposition, then you need to be absolutely sure that the market size is there, and you can attract them, and everything else. At the moment, there just isn't enough market volume in that area. So the investment costs that people have put into it, are not going to pay back.
24. **What I'm saying is that, I think, in breaking up the banking model and splitting it out, I think there's a very real thing that says the First Direct model and aggregating retail banking is starting to work, in the sense that providing you get the service right, and people can trust their providers – and there has been very little trust in the banking sector – if you can get that trust right, then you should be able to provide and maintain a service covering a great many products and services across a wide range; and the up-sell and cross-sell potential across that base is quite high. So, if you like, what I'm saying is that the FS market is splitting up to a degree between those players like First Direct and Goldfish and the 4 big retail banks, who will provide the full range – or as full a range as possible – of retail financial services, and those that are niche players and new entrants who will focus on certain areas, like MBNA on credit cards; but the current number of players will definitely consolidate, because people do need to build critical mass,**



because the valuable customers [are very few] - there may be, whatever it is, 30m current accounts, but there's probably only 5m of them that make any money – so there is intense competition for the share of wallet, share of customer who really does have higher value. So, you'll get consolidation as people build critical mass for that.

25. **GS - When I was talking about a decomposition of the banking model, I thought that if you think of it in terms of the supply chain, there is a role for providers of telecommunications and ISPs. Do you see ISPs or telecommunication companies - well I wouldn't say a threat – but as potential entrants?**
26. DR - I think that the reality is that between the sort of utilities, consumer services companies, banks and, you know, Microsofts of this world and big mobile players, Vodafone etc., they're all competing and converging into share of customer, if you like. And the key thing we've got to ask ourselves - all of these players are threats, but who will succeed at the end of the day is where you have competitive advantage – is 'Do the telecoms companies have more competitive advantage than Centrica and British Gas?' I would probably say not in that arena. 'Do the banks have more competitive advantage than Goldfish?' Well, they certainly, at the minute, have a large inert customer base; so from that point of view they definitely do. As to whether they will grow, is another matter. So there's issues like that, where what we have to understand is that the people who will succeed are not necessarily those who have large customer base, but those who can really build loyal customer base with value-added services; and that's a difficult game.
27. **GS - I see. Now, I just wanted to move on to discussing about investment decisions, and more particularly to getting insights from your expertise as the FD in Goldfish. What is your experience on the process of deciding on IT investments, and specifically those relevant to e-banking? My key question there is, what is the role of financial or other types of appraisal for these projects, before they happen, after they happen, and during their implementation?**
28. DR - As I said, these are big projects, and, to be honest with you, the way that Goldfish has been set-up is using a systems integrator; in other words, Price Waterhouse Coopers or Accenture, for instance, tender to do a set of releases, so, just for illustration purposes, say there's 10m GBP for a set of work releases and work packages to deliver a piece of infrastructure to build a personal loan platform or whatever. A finance team basically are integrally involved in the tender process for the SI, and then they actually hold definition and structuring and the Cost-Benefit Analysis of each of the work packages that underpin that 10m. And then, once it's approved, they're responsible for making sure that the monitoring and controlling of the costs and measurement of the benefits, is tracked very closely after the launch of the IT project. But we outsource a lot of the expertise to this, so it needs very close control of our sources and consultants, so there's an intense amount of work to do with that. And then, the finance team is very responsible with the business systems, of making sure that the learning from that, and post-investment appraisal are fully embedded within the business; so there is absolute control in every stage.
29. **GS - So, what you say is that it's more an integrated approach.**
30. DR - Yes.
31. **GS - In my literature review, I've come across a host of methods for evaluating IT investments – I can't really estimate a number, but they were more than 100 available methods for doing that. So what I'm trying to find out**



is, is there a practical use for these techniques? What do you see their role to be? What is the case with Goldfish? Using financial techniques for appraising IT investments in particular, is it something that your company – and companies appraising Internet banking projects use specifically?

32. DR - You mean, is there any technique that is absolutely specific to this?
33. **GS - I mean, is there a technique or a host of techniques that are used specifically for this type of investments?**
34. DR - I think the technique is no different from any big IT project. Internet banking is no different from building a big IT project in another part of the business, if you see what I mean. They have the complexity...the key issue is being able to control the cost; between scope, definition and scope reap and changing scope over the period; the changing nature of that means that you have to continually re-baseline the financial appraisal to make sure that you're tracking the cost-benefits at every stage. I don't think there's anything unique about that compared to any other big IT project, if you see what I mean. It's difficult as ever to track benefits from this sort of thing; and Internet banking start-ups by nature are quite volatile; you're predicting the unpredictable. So from that degree, the measurement of benefits is certainly not easy. But then again it never *is* easy in these instances; but the only difference, I'd say, is that Internet banking or electronic banking projects tend to be more unpredictable, because what we've been trying to do is actually develop a market, as well as actually gain market share. And those two areas are quite difficult to do at the same time, if you see what I mean. If you're in a mature market, trying to pick up market share is not easy, because customers are aware of what's going on.
35. **GS - You mentioned that during the CBA, there is a continuous re-assessment of costs and benefits throughout the implementation process. Which would you say have been – in the case of Goldfish and from your experience – the most pertinent costs or benefits that have been cropping up during the process of implementation? I mean, there should be a difference between where you start from in doing the financial appraisal, and where the costs and benefits end up at the latest stages of the implementation. Are there any specific costs and benefits that were most pertinent that your team has located during implementation?**
36. DR - There's no doubt about it; the costs of process design and the operational model are far more likely to be forgotten about and left out of the appraisal; and this is the cost of designing the detail processes, making sure that all the customer experience mapping is joined up etc., making sure that the banking operation sections are fully aligned and all the processes, from acquisition to withdrawal, to servicing etc. are completely aligned; and from a financial appraisal point of view, that's certainly the area that has caused the most problems, in terms of trying to estimate at each stage what the operating model looks like. So, that is certainly being the biggest challenge, because the IT costs are actually sometimes the most well-defined.
37. **GS - Lately in the industry – I don't know how extensively this has happened in the FS industry – there is a more extensive use of Real Options approaches. Is this something that you consider of value, or would you say that it is just a complex method?**
38. DR - I think that, in a way, if you take it down to the granular level, and you have absolute clarity of what you're doing, then Real Option stuff [is] useful, [but otherwise] can almost confuse the issue by giving you too many options and too many statistical bases; in a way analysis leads to paralysis. I'm not saying that is always the case, but it is a danger. So I think we found the best way is to keep the

costs – take a 10m project, if you've got 50 sub-projects within that 10m, you've got a grip over the whole of them and what they're doing towards the whole; then that's a far better way of making sure that you're doing the right thing;

39. **GS - You've probably seen in my email, that what I'm trying to investigate on investment appraisal for IT projects is the financial evaluation of aspects that are not traditionally perceived by the implementing firm. One of them, which is becoming more and more – during the later days – of fashion, is the valuation of knowledge assets. Is there a proxy in your financial evaluations for that? I know that Goldfish's 1.1m customers is a huge customer relations base. Is there a way to assign values to this, if you like, information or knowledge?**
40. DR - Yes, I've heard about it myself; I've certainly never tried to do that stuff in Goldfish. It's just a [high] level of sophistication. We've got, if you like, too many more immediate things to worry about – it's not missed the meaning, because I'm sure that understanding where your value lies in the organisation, in your people assets, in your physical assets, your knowledge, your information, your data etc. is important; I'm not saying that it isn't – but I think for where we're at, I can call it a pretty chaotic, very hard driving start-up, it doesn't figure on the map at this moment.
41. **GS - Do you think that there is a value on reporting (I don't know if there is currently a formal or informal way of inserting valuation of customer assets or knowledge assets, as the literature goes about them) in financial statements or financial reports? Do you think there would be any value on that?**
42. DR - There probably would be in terms of financial reporting going forward; I agree; not though on the Balance Sheet but on accounting notes disclosure. You know, in the notes in the accounts, so that people understand where the value is in the business. But I don't think people should start things like putting brand valuation stuff on the Balance Sheet.
43. **GS - Now, going back to the Internet banking implementation, how would you say that this changes the shape of the organisation? Goldfish started from being a credit card operator – definitely a financial institution – to expanding to alternative channels like the Internet. How have you observed these operations to change the shape of the way that the company operates?**
44. DR - As I said, the head office in our organisation is really very much focused on programme at the moment; so we've got a lot of programme staff who are doing the implementation, but very few on what I call business as usual; people are building a contact centre at the moment; we have a huge amount of effort going into building that, because that's our key channel if you like. And then, on the other side, with programme implementation stuff, is that a lot of it is outsourced; people like Accenture or whatever provide an outsourced service to do the outsource build. So in other words, what they were building is actually quite a virtual model whereby you have got a significant contact centre; most of the processing is outsourced to card processors and that sort of thing, and then you've got a very thin head office who are mainly marketing and risk and operations; but mainly who are controlling and running the operations. But what we're not building is a huge retail bank with everything in-source. We're trying to obviously get as low a cost model as we can.
45. **GS - Yes, I see. Now, again on the implementation issues; would you say that there is a mechanism in place for post-implementation evaluation in Goldfish?**

46. DR - That's what we're doing in every stage; so back on the illustration of the 10m GBP, every million GBP of that if you like has a post-investment appraisal. So, we're making sure that, at each stage, the costs and benefits are being realised. The benefits are definitely being realised, so the 10m GBP that we spend or whatever has definitely contributed to the developing of the bank in the way that we originally thought it would. And that's what the post-investment appraisal process is designed to do.
47. **GS - Let me now move actually to the last section of the issues I wanted to discuss, and this is about expertise in Internet banking. How would you say that Internet banking operations affect, first of all, financial innovation, in the sense that, for example, if we look back at the 90's there was a tremendous amount of financial innovation - in the sense of financial engineering if you like - which came from the introduction of new technologies and issues like disintermediation and the change of the whole structure of the banking system. Is it the case that Internet banking, as a mode of delivery, is giving rise to a set of new financially engineered products?**
48. DR - I don't think it is; because I think the amount of product differentiation at this stage is pretty limited to the retail banks. So, in other words, people are really differentiating by price, or else - like Goldfish - differentiate on loyalty schemes and that sort of thing. What's not happening is that you're not getting much product differentiation on personal loans or savings accounts and this sort of thing. I mean, sure, there's little bells and whistles that are being added, but they're not wholesale changes; I think the next era of differentiation will be around channels; because with the multi-channel integrated environment, you will have far more ability to cross-service, cross-sell and give a far more holistic experience for the customer; and I think that's the next stage of differentiation. But the costs of *product* differentiation are quite significant; for instance, the *netting* proposition, that has really been in the market for the last 2 years, which nets you savings and current account and mortgage etc. which IF have been doing and Virgin, and all that lot, is still a pretty complex proposition. And this product differentiation is still not mass-market. It *will* become bigger, but it's still quite complex.
49. **GS - So, what you're saying is that the differentiation is not in the financial product *per se* but rather on the channel, and on the delivery mode.**
50. DR - Yes, that's right. There isn't a lot more to do on products that customers want, or don't receive already; but I think the delivery and the mechanism and the service differentiation is fairly pivotal.
51. **GS - That's an interesting observation. What I would envisage is that there should be something like a feedback mechanism from the delivery channel to the financial engineering area and again back to the delivery channel. Obviously, from what you're saying, this is not the case. Now, let me go back to the expertise issue. There is the contention that electronic banking has given rise to a new area of expertise - the FS IT expertise. Do you see that, in the current status of Internet banking delivery, financial expertise is still the pertinent one? For example, for a pure-play electronic bank, is IT expertise more important? Is banking expertise more important? Or is there something else?**
52. DR - I think those skills are always important; but I think the *customer skills*, in other words servicing and selling and retailing skills are by far the most important ones. And those are in short supply. There's enough experts out there who can deliver big IT projects and that sort of thing, but actually getting value out of your customer base and delivering excellent service at the front end, those are the skills

that will survive in the long-term marketplace. And likewise, core-banking skills was very important. There is a lot of bankers and skill sets; they can manage risk etc. But really, managing the customer asset, which is what retail banking is all about, is a far more difficult game.

53. **GS - So, what you're actually saying is that it's marketing rather than [anything else].**
54. DR - Well, it's sales, marketing and customer services; those are the three disciplines. Not just marketing. Because marketing is one element. It's sales, marketing and customer services skills that I think ultimately will create value out of electronic banking in the future.
55. **GS - Now, let me go to technological standards. First of all, let me observe that the pace by which e-banking is moving is maybe too fast for standards organisations like ISO and so on, to set-up standards for the market to operate on. The existing standards, OFX, IFX in the US and HBCI in Germany, are some of the exchange systems prevailing. What is Goldfish's take in relation to these banking standards? Are your thoughts directed to this channel, or is there a case for banks joining forces in order to make their own standard a global one?**
56. DR - I think, the reality is that Goldfish is a new player to all of these standards, to be honest with you; and we're a low user anyway. For people like the big retail banks, it is a big issue. It's a significant cost, and it is a big alignment issue. We've really been sort of piggy bagging on the back of all of the standards and controls, and absolutely complying; but we're not big enough to justify a seat at the table to really get that involved. So, to be honest with you, we regard this as something that the big players will probably direct, and we'll just follow behind. We're not leading this, is what I mean.
57. **GS - If you are a pure-play bank, then I guess you want to have some kind of connectivity with, say, networks of ATMs of other banks in order to offer the service to the customer to be able to withdraw money from their [Goldfish] account. Isn't this a banking systems issue?**
58. DR - It is. It definitely is important for us, but it's even more important for the big players. We get a lot of this by Lloyds anyway, as our joint venture partner, and obviously it is absolutely critical to them; it's very important to us, but it's not as big a deal, so it's the sort of thing that we have representation on, and we're looking at these areas and making sure that [we are heard] – where it doesn't seem to be moving in our direction, but our voice gets somewhat drowned by the bigger players in these sorts of areas. We just don't have enough market presence to push [things]; that's the reality: the 4 big retail banks really do have far more say in all this, as an industry body if you like.
59. **GS - What is your opinion about account aggregators? Do you think that this is something [that will be established] in the future?**
60. DR - Like 'netting'; it's very difficult; amongst anything, getting it consistent, from a customer viewpoint, across any of the services that you take from providers, is very difficult. Because the levels of security and confidentiality across banks, versus Amazon.co.uk or whatever, is very different. So, trying to aggregate your bills and 'screen scraping', as they're calling it, is technologically very possible, but I don't think consumers are ready for it. There is enough issues with the take-up of e-banking anyway, in terms of security and confidentiality and paying over the Net; and sharing that with account aggregators and making it absolutely watertight has still some way to go. So, again I think, for a segment of customers it will probably



be a very valuable service in the future, but I don't think it's mass-market and it won't be for some time.

61. **GS - So, it's more than a regulatory issue?**

62. DR - Yes, I agree; the reality is that there are big customer issues with it. So, if the marketplace isn't proven, then irrespective of what the regulators think, people won't play there.

63. **GS - Well, I hope I didn't take too much of your time.**

64. DR - I hope it's been helpful.

65. **GS - Yes, it has been very helpful; what I'd like to ask you, if this is possible, would you recommend some of your colleagues that I can speak to, from the department that you're in, or even people in Lloyds – since Lloyds is your partner in Goldfish? Would that be possible at all?**

66. DR - Yes, what sort of areas do you want to talk about or drill down to, so that I can give you a better view?

67. **GS - Well, the most important one is on systems implementation - and that relates, not so much to the technical nitty-gritty, but rather to the implementation process, problems that occurred, how these were dealt with etc.; or to give you a picture, how the different occurrences of problems and so on, were reflected on the CBA. The other area that I would like to dig in, is again relating to the financial appraisal.**

68. DR - Well, there's a guy who works for me [ ] and he works in Finance. He actually manages the IT Finance budgets, and he knows an awful lot about the IT projects. He's probably as good a place to start, if you want to try him. Send him an email and say you've had a word with me and the content [of our discussion] and then just set up a time and try to have a chat with him. He's certainly knowledgeable of all the finance-IT stuff.

69. **GS - Thank you. That would be a great way to start; once I transcribe this conversation, I will make sure I send you a copy. If there is any way that I can be of use to you, please don't hesitate to ask me. If you want any more details of my research or anything relevant. Before we hang-up – and I apologise for holding you more – would it be possible in the future to have another conversation about these issues? As you may appreciate, my research is evolving and new things crop up, so I think that would be of extreme help to me.**

70. DR - Yes that will be fine. We can certainly keep on contact.

71. **GS - Alright, thanks very much for your time; you've been very very helpful. Bye.**

## 9.2. Telephone Interview, 21/06/2002

1. **GS – First of all, how much time do you have?**
2. CM – I'm OK for the time being, so carry on and we'll see.
3. **GS – Right. I'd like to start from just a brief introduction of myself, where I come from and what I do, so that you know my background; and then we'll carry on with the conversation, which is mainly about electronic banking projects, IT projects and the side of financial appraisal. So, I am originally an electronic engineer, I specialised in telecoms; wireless networks; I then did an MBA here in Edinburgh; I worked in Greece for 3 years in networks administration and I am currently doing my PhD and I am also a research associate with the University on an e-learning project. Specifically, what I am looking into in Internet Banking, apart from the overall strategic and organisational issues, are things about the Investment Appraisal and investment decision-making process for Internet Banking. So, this is where I come from. Would you like to tell me a few things about yourself, your background.**
4. CM – Yes, sure. I believe you got my name from DR. I am currently working at Goldfish. I am actually seconded from Lloyds TSB. I work for Lloyds TSB; I've been there for about 8 years now, following my time studying at University etc. I joined Lloyds TSB 8 years ago in the Finance department. So I've been probably with 6-7 different departments, working on all sorts of things, initially as part of the graduate recruitment programme, graduate development programme. And for the last 2 or so years, I've been working in, I guess what is the Internet Bank division. Initially, Lloyds TSB's Internet Bank division we had was Evolve-bank. And in the last 12-18 months or so, as I said I was seconded to Goldfish, the joint venture that Lloyds has setup with Centrica. And that is I guess how you got my name in the first place; the work with DR was initially about the structure of Goldfish Bank, and that's where I am at the moment.
5. **GS – Right. Now, your involvement in IT projects in general, is this something new for you?**
6. CM – Yes; relatively I suppose since I moved to that bank after working at Evolve; so started about 2 years ago now. I was working in various departments of Lloyds which were within Finance I would say, like operation of financial accounts, consolidations, budgets, regulatory reports, business analysis etc. Since July 2000, I've been in the Internet bank, again predominantly working on the finance side of things, and then lastly in the last 18 months or so, with Goldfish, having the setup of the finance department there; and therefore with the sort of IS support, working on that.
7. **GS – Since you come from a Finance background and work on IT projects, how do you find the process of investment appraisal and financial appraisal in IT as opposed to other types of projects?**
8. CM – I guess there's quite an appetite I think at the moment for expenditure within the IS project in the Internet division and we're finding that it's proving to be very much more expensive than perhaps initially thought for all of us; I guess the sort of Internet revolution in terms of the banking sector started about 2.5 years ago, and a number of institutions wanted to make sure they didn't miss out on that. And Lloyds TSB where I was at that time was very much a part of that, wanting to make sure that they were part of that revolution and decided to setup the Internet-only bank. But there was also the ability of the nature to need to move distribution

channels from branch-based or telephone-based into the Internet banking world. With Lloyds TSB, I think they've now made the decision that the Internet-only platform isn't necessarily the right approach. Customers are wanting a variety of distribution channels and particularly wanting the usefulness and convenience of having that branch network, and also the convenience of being able to access your account via the Internet anytime during the day. So, it is very much a sort of cross-channel distribution approach, rather than a single Internet-only. Now, as regards the sort of investment appraisal decisions, I guess perhaps 2-3 years ago, less emphasis was placed on what the full benefit of the Internet-only distribution channel was going to be; than perhaps what would happen now, there was the need and the desire to jump on the bandwagon with it.

9. **GS – What you have just described is some kind of change of perception. Is it that the perception back then – early 1999, which actually comes with the dot com boom – was based on sanguine estimations? That there was there a misconception on things? And I am not talking about Lloyds; I am talking in general.**
10. CM – Well, in general, my personal experience, I guess, while I've been with Lloyds and then Goldfish, 2 or 3 years ago, when the Internet was seen as the answer to a lot of people's concerns about accessing your accounts, if you're giving yourself a financial base to that desire, or, in general, across this whole world of convenience of using the Internet for, I don't know, booking cinema tickets or booking flights or have access to your banking details or catching up on the news, when all these things began to catch-on, people ran away with the view that it *would* be the answer to everything; but, I guess, from the banking perspective, we have now realised that people want to have personal contact – whether that be face to face or whether that be over the telephone. The Internet and the sort of dot com boom only lasted 6-9 months I guess. People like to have more of the comfort factor to hang with them, and the security and safety of an individual person, rather than looking to and talking to a machine.
11. **GS – So, in terms of the financial side of things and the financial appraisal, what was usually the approach back then? What was the case for a bank, for example, from your experience with Lloyds and so on, - and I'm talking about the decision-making process? Would it just go for such a solution without much financial thought into that?**
12. CM – Well, I wouldn't say it would just only be lack of financial thought, but I guess the sort of benefits that were considered to be delivered over a 3-5 year period, were probably drastically higher 2-3 years ago than they are now. As I said, with projects within Lloyds, the Internet bank was not the only project within the department; there were a number of projects and we did financial appraisal on these, and decisions on allocations of budget etc. Other sorts of projects where we would make a decision whether to make a major investment quite a while ago, like telephone call centres or things like updating our own systems to 21<sup>st</sup> century technologies {laugh}, your accounts will run real-time basically, but for banking, the situation is that the system will close down at midnight, run through all the batches overnight, it's not supposed to allow any transactions until 3 o'clock in the morning; At Lloyds TSB right now, all that in real time; and there was the investment appraisal to go along that. In terms of the decision-making process, what sort of details you want to get into?
13. **GS – Well, actually, I wanted more or less to talk about the overall process of implementation, starting from putting in a proposal, getting the decisions on the business proposition, the financial appraisal and so on.**



14. CM – Effectively, the sort of decision-making process, I guess the initial concept, the initial ideas which are developed by the senior management team who then bring these ideas to the Finance department to work on, together with consultancy and a lot of external help, people who are there to help to get out ideas on how much it is going to cost, because lots of these investment decisions are introduced by... A lot of support would be looked for from external consultants like PWC (which Lloyds are using continuously for years), in terms of generating ideas and turning that around, looking at the external market research to see what benefit will be derived, how people will use the particular routes for their banking requirements, whether it's suitable in the UK, South Europe etc. or worldwide, or anything like that.
15. How much the system is going to cost, in terms of hardware, software development; which products are going to be suitable; whether it's appropriate to do credit cards or bank statements or current accounts, savings accounts, loans, mortgages, all that sort of thing; bring all that together, how many people are going to use it, generating volumes, generating costs about servicing these accounts, generating the income that is going to come through from that; bringing that all together, making a business case. Within Lloyds we used to have a process for initial business cases, you know, the idea, the concept; a preliminary before too much is done, the headline figures etc. after we've done this research; that would go through a decision-making body to decide whether it's worth doing further research, further work to build a full business case, and the initial business case takes that sort of green light to go into this further research or go away and come back with a different concept or idea. When the full business case is produced, a lot of detail will be in terms of how this research is done – with PWC etc. – what products are going to be suitable, pull all that together to work out what the value in a sort of 5 year, 10 year, 20 year basis is going to be, taking into account the cost of the equity, the cost of capital, whether or not this is an appropriate decision to invest this amount of money, and then compare that with other projects that are wanting to go, like the ones we talked about, banking via telephone and this sort of thing.
16. **GS – Is it actually that the projects are competing within the same budget – i.e. the IT budget? Or is there competition between, say, dissimilar projects?**
17. CM – There is very much of a competition; in terms of whether the projects go ahead or not, there is – within Lloyds and other organisations – only a limited budget at the end of the day. Any investment decisions are going to take several years before you get payback; several years before you get any real contribution to your business, and therefore the management team has to decide whether it is an appropriate use of resources, use of time, to warrant spending X million of pounds on that sort of thing without getting any return in the short term; and therefore, yes, there is very much a competition between some projects that have, not necessarily a greater overall economic benefit to the organisation, but they can pay back in a shorter period of time.
18. **GS – Speaking of the change of perception between what probably just everybody had back in 1999 and now, do you think that the actual methods and techniques used for the financial appraisal and for the overall appraisal of the project have changed?**
19. CM – I don't think that there is a natural change to the approach in how this sort of business cases are produced and what the benefits are; I think that what *has* changed though is the concept and the idea whether or not the evaluation of that business case is up to scrutiny in terms of questioning perhaps more the perceived volumes and the perceived benefit over the longer term. Now, a lot more emphasis is placed on how accurate these assumptions are. So, 2 or 3 years ago, the assumptions that were probably generated were OK when there was this dot com



boom, whereas the business world in general didn't necessarily perceive that it wasn't going to take off in quite the same way; it's quite interesting to see that the dot com boom has been lasting for more than 12 months now. So, in that, I think there is still a desire to move into a sort of multi-distribution channel approach; you know: whatever is the most convenient for your customer base is going to drive your overall success, your overall benefit sort of thing. So, if you are available on the Internet, you are available over the telephone, you are available via the post or even in the branches on the high street...

20. **GS – So, it's a matter of giving your customers all they need.**
21. CM – I think so; not expecting your customers to just to want one single contact.
22. **GS – I see. Right. Moving into the investment appraisal and financial appraisal issue, we just talked about the different stages of approval of a project and so on; what have you seen the participation of the Finance function to be in all those stages? What I'm saying is, is there a case for separating, for example, the strategic evaluation from the financial one? Are these two things seen as separate, or are they more and more converging into one?**
23. CM – Well, very much the Finance team is working in conjunction with the business itself; which means that the business function come up with all these ideas in terms of product deliverables, IS spending etc. It's down to the Finance department to challenge some of those ideas, the system of those concepts for the level of realism, over some aspirations of, perhaps, the marketing director or an IS director. So, it is very much a 'hand-in-hand' together {between Finance and Business}. It's not that Finance department are going off and coming-up with new ideas; they very much join the others in generating value for the business. The Finance department, in my experience, is doing the sense-checking, I guess, to make sure that what is being delivered, what's going up to the senior management or the Board for the executive decisions are on purpose and are realistic. I suppose, at the end of the day, it's that the business has to deliver some actual results; and the stand of Finance team is to help is decision making on pricing or on what the public and the customers want.
24. **GS – Right. What I'm trying to investigate there, are more or less the power relations between the different expert groups. So, for example, in a financial institution, say Goldfish Bank, or Lloyds or whoever, there are different expert groups who participate in these {decisions}.**
25. CM – Yes, there are. When I say there's the Finance team, within Goldfish, we only have a fairly small Finance team; we are doing various different elements and some of them are a sort of business support type that I'm talking about; helping the business to generate ideas, sense-check the business plans etc. Then there are other specialists within Finance who are actually monitoring what the business is doing and reporting and controlling and acting as almost to please the investment decision takers; invite some people from other specialist areas to help monitor the expenditure of that product, that project, and others to look at how the business is moving forward as a whole. It's certainly not one Finance person who's doing all the work, and one Finance team will certainly do need specialist areas. And as the business develops, you're going to have a changing role of the Finance team from being more about evaluation and support and investment appraisal approach, to more support for the business and making sure that the project is implemented on time, on cost budget etc. And then also there's the reporting of the industry on specific products. It's a changing role for the business and a changing role for the Finance together with that.

26. **GS – In terms of CBA, what I wanted to talk about there, are 2 separate issues: the identification of costs and benefits and the evaluation of costs and benefits. Are these two something that you're looking at in an integrated approach? What I am contending there is that - as you probably know a lot better than I do – the use of methods (whether they be NPV or whatever) is a mechanism which takes some input, i.e. the identified costs and benefits, and then gives an output; if the input is wrong then the output is wrong. What is your take there?**
27. **CM – There's 2 approaches to the investment appraisal and the business case; there's initially what the actual profit and loss will be for the business, how much the business is going to expect to generate; they have to expect certain losses in the initial years; how much of that can be solid; if you're only expecting to have losses throughout 2 or 3 years or something like that, and then expect to turn then into a profit. Then certainly you also get the overall valuation in terms of how much is this business going to generate over a 10-year or 20-year period, and therefore how much is this business – the Goldfish Bank – going to generate to the overall valuation of business within Centrica; how much of this is going to be generated to the share price. So, there's certainly two approaches, very much looking at the short-term, payback, how much is going to cost to be an ally, how much is going to cost in terms of cash etc. to be injected and then also very much looking into the overall valuation. But I think, from my experience in Lloyds and Goldfish, the emphasis that is certainly looked at is the short-term; how is this going to cope in 2-3 years, and less emphasis is placed on the overall valuation. I think probably down to the fact of perhaps the changing in the Internet boom over the last 3 years, where it was always assumed that it will not cost very much and that it's going to generate huge value for the business. I think the reality is now that, as it proves, it's going to cost a lot of money, take several years to develop, and, reality accepting, you've got to be realistic over your volumes and the evaluation of the high standards of service.**
28. **GS – Right. So it is actually about making the decision that you can't possibly predict too far in the future.**
29. **CM – Well, you have to have realistic views of what volumes you're going to take up, the question therefore being what the business and the marketing and product directors are believing is going to happen. And, in the longer term, what the IS directors are believing it is going to cost to do this in matching the aspirations of the product manager with the reality that's out there.**
30. **GS – Regarding costs and benefits again, and their identification, arguably, there is a lot of what we use to call intangibles. Is there an approach you're using for assigning monetary values to these intangibles? I mean, for example there is quite a long list of such things like customer satisfaction, trust, different effects on the firm from different sides, the structure, the development of new entities, the quality of work and all this kind of things.**
31. **CM – Yes, a lot of what you're saying is almost down to the value of the brand, and whether or not your brand is going to be able to take-off. So, for example, Goldfish at the moment is a credit card business and the decision was taken 2-3 years ago that we want to expand that and move that into a bank, using the Internet as not purely the only distribution {channel} but... Therefore that helps to generate and drive new volumes and customer satisfaction, and if your customers are satisfied, they come back and buy new products from you, and the brand itself helps to drive the business; so, in terms of the business case as it is now, we don't necessarily put a particular value on that brand, but that has helped to generate your new volumes and to see how realistic some of those volumes are going to be.**

32. **GS – I see, right. Now, regarding the way that actually you are expecting or you take an account (in your financial appraisal - or the overall appraisal) of how a project like that where value lies in using the Internet as a new channel, how does that affect the use of this new channel and the structure of the organisation and the way that the organisation functions? Is that something that you're looking into? Is that something that you take account of and you expect to generate costs or benefits from?**
33. CM – I think, from my experience with both Lloyds and Goldfish, the Internet is not the only answer; and customers like the convenience of the Internet but they want to have these other routes available, as we were saying earlier. In terms of the structure of the organisation, we don't silo it in the Internet as a distribution or the telephone as a distribution only; they're pulled together in terms of that the way that we structured Goldfish is very much a cross-product deliverables; you know, a team focuses on the credit card and another team focuses on other products like savings accounts or personal loans or something like that; and then a department is looking into marketing, a department is looking into development, IS, and then other departments are looking at the operational running of the business and support services, things like that. We certainly don't structure ourselves in silos or by distribution channel. We don't even have the ability to, I guess, report solely on whether customers are using one route or the other at the moment; that will be ready next May; that's when we will have our CRM data on what distribution channel each customer is using. In the Internet, our systems and banking platforms have proved correct, and therefore we need to make sure they're used effectively; instead, call centres are very expensive; you need to have 100-150 staff; all this staff costs and the building premises cost; and the transaction costs are going down one particular route or the other, once we're going to move into a more mature business, am I going to be required to decide how to influence what customers are doing? How customers are behaving; the person to use the branch, the person to use the telephone, the person to use the Internet, and therefore you can decide how to act in terms of pricing; how to influence all that, or costs or penalties for having, for example, statements printed, say, rather than use the Internet and print them off their selves.
34. **GS – In terms of the overall implementation of the Internet banking project with Goldfish, which ones would you say were the most important unexpected or unanticipated costs, or even unanticipated benefits that you've seen?**
35. CM – To be honest, we haven't yet seen the benefits; we're in the development stage at the moment; I think, as I said, that the costs are, not escalating, but certainly looking to be as high as anything; and I think, that the time that takes to develop your product and your software etc. Goldfish had the initial view, say, to trial 18 months ago, that it would be very simple to launch 5 products within a 5-month period; A year has gone and we have only launched one product and the time taken to develop that purely in terms of the management decision-making that has been required is considerable. I guess that is probably one of the biggest surprises of the business: how long it takes.
36. **GS – Right. If we wanted to talk in terms of a flowchart, was it a matter of putting more boxes in the flowchart, or expanding the existing boxes?**
37. CM – What do you mean?
38. **GS – I mean, within the process of implementation, you may, for example, find that one specific process takes more time; or that you may find that you may need to have a feedback loop or an additional process in the whole implementation; an additional stage if you like. Is that something that you**



**came across? Adding stages to the implementation in, for example, testing or user acceptance and that kind of thing?**

39. CM – Yes, you're right. There is this generic project lifecycle you were saying: your concept, your business case, your research, your development, your systems testing, your business user testing. I don't think, within Goldfish, there have been any new, any unexpected processes; the question to be answered is how long it takes in each of these routes in terms of generating your concept, turning this concept from a bit of paper into hardware boxes and software development, user testing and systems testing. I guess the frustration with the business is that it takes such long time.
40. **GS – Right. I just wanted to move a bit closer to the methodologies for the financial appraisal; more into the Finance perspective. There is, extensively in the literature that I am dealing with, and the opinion from practitioners as well, that there is a separation between risk and uncertainty in the way that, for example, the conventional methods like the NPV and IRR and so on, deal with it. They're using for example risk and higher hurdle rates as proxies for uncertainty, whereas uncertainty is something that may have positive connotations. For example, one project can be uncertain in terms of unexpected costs or unexpected benefits, where benefits have a positive sign in front of them; whereas risk is an inherently negative concept. Is this something that is taken into account *within* the methods themselves?**
41. CM – In investment appraisals with Goldfish, we have a financial model, which is used to generate the results based on profit and loss on a month-by-month or year-by-year basis, and several valuations for 5 and 10-year periods, as I was saying. Within that, we build that in quite a very detailed level, in terms of product volumes, cross-sales of products, your price of transactions, the cost of your marketing and then your overall support costs for that. Each one of those, therefore, they get challenged by the Finance team and by the Management team when the ideas are being generated, to try and bring this level of realism into it, so that there is less of a need to wait for any particular elements – risk factors as you were saying; we certainly don't wait; the costs and the volumes and the marketing areas will be built-up at a low detail basis; so that we try to get the right level of realism about the results to come out. We don't wait. We have to decide, well, if the model is generating 200m we think 'let's think whether this will be delivered if we put 20m contingency into that, or a more flat rate. We don't do that. We don't go into that detailed level.
42. **GS – One of the methods, which have been quite popular lately, is the Real Options valuation. I'm sure you've come across this kind of approach. Do you see any potential or any value in using these kinds of methods?**
43. CM – Well, certainly in terms of the valuation of our business and our model, we have another level of realism as appropriate; we have an external consultants audit on our results, and we certainly share and try to get in concert in the numbers by sharing them with PWC who are our auditors from the business point of view, and making some sort of valuation of that; and they question our assumptions and things like that. We certainly go down that route, but in terms of other methodologies, we don't look at them.
44. **GS – Right, I see. Is there any provision or anything in the future plans for assigning values on things like knowledge assets?**
45. CM – I guess it is a sort of... Within the business plan, there is certainly a valuation put on the value of the brand; and in Goldfish, we know that this is a given number; because we Goldfish are in a unique situation to buy, and our customers and we



have come to an agreement with HFC who have been operating the credit card and the systems up until now. We do market our model of business, we know very well what the brand has cost us physically to purchase it, and obviously, in terms of the brand, we untie that over a number of years. We don't put a particular value on our staff or anything like that; we have a value on our hardware and our development and how much it has cost us in terms of accounting purposes, and we capitalise and ramify that over a number of years, but we don't add any value for the intangible system or the knowledge of the department, the staff and things like that.

46. **GS – What I had in mind when I asked that was, for example, the contribution of developing a new IT system – and its contribution in the knowledge management side of things – there are methodologies and models developed about Knowledge Accounting and all this kind of thing if you know what I mean. What I was asking there, was whether you identify this contribution using the Internet banking system to the overall...**
47. CM – Not in the base business plan or anything like that; what we do is to share this with our auditors and ask them to value us. And a separate report is generated and provided to the Board of Goldfish and the Executive Board of Centrica's business as a whole; and Goldfish has its shareholders as a joint venture company as well from Lloyds TSB, and the valuation in share price is separate, work is undertaken by... contributions from Goldfish Finance and external bodies, auditors, companies etc. to generate some advice. What they're specifically doing, they have not been involved in the operational side, so they're a little bit vague; so whether or not we use a particular methodology or not and this is alright, I don't know. It's something they're particularly new in; our base business plan we don't put any value on knowledge.
48. **GS – In terms of the process of implementing the whole project, starting from scratch, moving into the different stages and finalising it and so on, is there an appraisal process in place done at each stage? Is there a feedback loop from each stage back to {previous ones}?**
49. CM – There is a continual reiteration we thought of; where we think our business is going to be, and with that there is a changing opinion on what the volumes are going to be, what product we're certainly going to launch etc. So, the business plan to launch Goldfish Bank, 2 years ago or whatever and the business plan now are quite different, in terms of, physically what we're going to do, what we're going to deliver, how many products we're going to have, what the value of those are etc. what the speed of take up were going to be; we certainly have a continual re-forecasting, re-analysing new ideas, new volumes etc. a) It's part of the management team change and the ideas changed with that and b) further knowledge of how much this is going to cost, what the projected volumes are going to be, you know, because, as I said, there's a changed, a different view of the external world as time continues. And so as a process within Goldfish, we have Goldfish Board of Directors etc. and therefore the decisions to continue on a particular route are taken on a fairly regular basis; we're doing it in stages; there was the green light to go on and develop Goldfish Bank and then go away and come up with a particular business case and product; and there is a product you need to get your head around to go with it; you know, in initial phases of products you have to go back and get the decision to go to phase 2.
50. **GS – Yes, I see. Right. All these results that you get from all this continuous re-assessment, are these in any way – I wouldn't say 'codified' but – documented? New knowledge is generated. Is this somehow recorded?**

51. CM – Yes, very much so, in terms of... we had our mark in the sand when the initial business plan was developed. Therefore, whenever we had this iteration we had to be able to measure how much is new from our original concept. Whenever the Board signed off on something, where in reality we were 3 months or 6 months or 12 months later, we needed to be able to go back to our original business plan and explain why the value is new, why the profit and loss is new, so there's a continual reconciliation, I guess, back to the original business plan. And now we've got a mark in the sand again, saying 'now', and when we come to further iterations and forecasts and plans etc., we'll be needing to make sure that we can explain movements from where we are again now. Yes, we certainly do document, authorise, sign off, get the Executive Board to buy-in to this particular plan and then implement and deliver *that*.
52. **GS – Is that used as a source of further knowledge for the future probably?**
53. CM – Yes, very much in terms of that we have files and records and we know where our business plans and forecasts are; yes; they're kept on records.
54. **GS – The last thing I wanted to talk about is generally about products in banking and their delivery through the Internet or alternative channels; have you seen – and if so, in which way, the introduction of Internet Banking, or alternative channel banking influencing the re-engineering, if you like, of products? Designing new products in a way that they be suitable for this channel, or another channel. Is this something that has happened?**
55. CM – Yes, it has. I perhaps have to go back to Lloyds TSB; not necessarily re-engineering products, but re-engineering pricing and what customers can do; I mean, a current account is a current account; a savings account is a savings account, whether you access it via post, or the Internet, but what differentiates it in terms of the costs of running that account, and therefore what cost you allocate to the product, and therefore what pricing you can generate; so for example, within Lloyds, Barclays, Natwest and things like that, your current accounts are seen as the base product. Because banks don't give any interest on those balances, you need your new start-ups; the Cahoots and the IFs of the world and that sort of stuff; when they have their current accounts, they're giving interest on those; therefore there's the pressure on the traditional retail bank who change their products in terms of pricing, but not necessarily in terms of what they're actually delivering. I think there was a change in the current account market; a couple of years prior to the Internet revolution, in terms of trying to move away from the reliance on purely Net Interest Income of current accounts, into a fee-based situation, and in terms of the 'Added-Value Accounts', providing insurance with your current account, or a better interest rate in exchange, like many banks like Lloyds and others have done; they're charging a fee for that additional service, whereas in the sort of Internet bank current account, they're not charging a fee for that account, but they're providing the outsourcing of additional services. Because they come for a lower cost in total that no branch network can support, or huge head offices and things like that, that they allocate. The Internet bank can do this by offering better interest rates; I guess there has been that sort of revolutions within the financial services; maybe 'revolution' is a strong word to use; I don't think that Internet banks, in my experience, have actually perhaps generated any of that change in the basic products or changing the pricing and facility; for example in Lloyds and Barclays and Natwest, you can get now your current account and your credit card on the Internet, which you couldn't do 2-3 years ago. To try to stay with those banks, rather than go for the Internet-based bank, it's a convenience factor.
56. **GS – Sure, I see. There is for the past few years that idea about account aggregation. There are one or two proposition like Citibank and Egg and so on. How do you see that taking-off? Or, do you think it's going to take-off?**

57. CM – If you're talking about the sort of Woolwich One Account, Barclays One Account, in terms of putting your mortgage with your savings account and they're charging you a lower interest rate on your mortgage, or not giving you interest on your savings account; that was a sort of differentiation in terms of product and the market is trying to copy that; it is very difficult to do though. Purely from the side of IS perspective and the financial perspective, it's quite difficult to replicate one of those product. If they have done it, they copyrighted the actual calculation – the design – to prevent other banks from doing that. And, in Goldfish, we have looked at that, but decided that this will be at the next {phase}; probably in phase 3; it's not even a phase 2 requirement A) because it's difficult to do, it's costly, timely, and we really want to get on and get the product out there, our basic propositions, and then try to sell *that* on the back of the value of the brand, rather than differentiate I suppose, in the market as a whole, there are a few institutions that are doing that; but I'm not sure they have taken-off to attract to a dramatic extent.
58. **GS – Well, this is one sort of Account Aggregation, while the other sort is about bringing together, (screen-scraping as DR referred to it) bringing all your bank accounts and your credit cards from all your providers in one terminal and so on.**
59. CM – Yes, from a personal perspective it's quite convenient to be able to see all of your accounts in one go ; the one thing that the Internet has probably done, I guess, is generating a lot more people do to more research and be a lot more fluid; a lot less loyal about where they put their money; moving more towards whatever deals they can get in terms of zero basis on their credit cards or higher basis on their savings accounts; and there's a lot more movement between accounts. Egg for example, when they first launched, they had 7bn GBP worth in savings accounts; they lowered their interest rates and lost 2bn overnight. They've still kept the remaining 5bn and they've got customer loyalty; and perhaps the competition hasn't generated enough movements elsewhere. From a bank's perspective, it's probably quite difficult: because we really want to sell more than one product to a customer; we want customers who hold 2 or 3 accounts; 2 or 3 of your products. Therefore, I think, there will be probably less of a will in trying to join in to the Account Aggregation. And Lloyds and Barclays are quite reluctant to pass over this information to allow your accounts to be accessed through, say, Egg's site. I'm not sure; that's an interesting one to speak about with other organisations, to see if any other businesses copied that idea; I think Egg isn't the first from the large organisations...
60. **GS – Well, it's a well-advanced thing in the US; I think there are something like 50 institutions offering Account Aggregation services in the US, but in the UK, Egg is the second after Citibank to do it. It's probably a regulatory thing as well; we'll see how things will develop.**
61. CM – I don't know; I think that if institutions can guarantee the security still, then I don't think the regulators are going to have too much of an issue with it, but I think one of the prime concerns of the regulator is the reduction on financial crime, fraud etc. Yes they're going to impose some penalties if aggregation is the easy route for fraudsters.
62. **GS – OK. That's more or less what I wanted to ask you; before I leave you, I'd like to ask you whether it would be possible to have another conversation in the future.**
63. CM – If this has been any help to you {laugh}, and if I can be of more assistance to you, I'd be happy to spend sometime talking to you again.

64. **GS – Yes, it definitely has. That would be great! Apart from that, is there anyone else in Goldfish or in Lloyds – as you said you come from Lloyds – that you would recommend I should speak to, about similar issues like the IT implementation process, the financial appraisal.**
65. CM – Sure, we may have a few colleagues in the IT Finance department in Goldfish who may be able to speak specifically about the valuation. I may approach some of my colleagues and see if they would be able to help; I can direct them to the general background information and then perhaps...If you have a list of questions that I can pass-on to them, that would be good. [TRACK 3]
66. **GS – That would be great. What I can do, is I can send you a reminder email sometime near about this.**
67. CM – Yes, sure; and I can check who is the most appropriate person to discuss with you.
68. **GS – I would be grateful. And the last thing before I leave you – sorry for keeping you for so long – I would like to ask: is there any kind of documentation that you can and that you're allowed to provide to me, regarding the financial appraisal, techniques, or methods or anything like that? Or is that all confidential? I don't know...Or even about the overall approach.**
69. CM – Let me think if there's anything appropriate. Please send back a reminder email and I'll have a look. I guess what you're looking for is a sort of generic view of Goldfish approach things, rather than the whole business case {laugh}
70. **GS – No, I'm not looking for that {laugh}.**
71. CM – So, I'll be back on Monday, so I'll be able to look for what you're asking. I'll respond one way or the other. I hope that this has been useful to you.
72. **GS – Yes, that has been really useful; more useful than you may have thought! Thanks very much indeed for taking this time. I hope we have the chance to talk again in the future. Thanks very much. Bye.**
73. CM – Bye.



10. **ABBHEY NATIONAL PLC.**

1. **GS – First of all, how much time you have?**
2. CW – One hour.
3. **GS – OK; that's great. I'll start by telling you briefly the different things that I would like to discuss today; then I'll tell you a few things about myself and then I would like you to tell me a few things about your own background and your experience in Abbey National or any other firm you've worked for, regarding e-banking and IT projects. I actually would divide this discussion into four parts. The one is about the overall issue of decision-making regarding IT; the second one is more specific to the investment appraisal process, be it financial appraisal, or strategic appraisal or whatever. The third one is where I would like to speak about expertise and the different groups of experts that participate in IT decisions; and the fourth one is regarding the role of Accounting and Finance in the overall decision-making process and investment appraisal. So, I'll start by saying a few things about myself: I am originally an electronic engineer and I specialised in telecommunications. I worked as a telecoms engineer for a couple of years in Greece; then did my MBA in Edinburgh University. I am currently doing this PhD and I am also a Research Associate with the University. The main subject of my PhD is technology management and it is actually focused on the financial services and on how IT, and specifically electronic banking is shaping these. So, this is more or less where I come from; would you like to tell me a few things about your own background and your experience?**
4. CW – I started off with corporate management training from UMIST; my first degree was in mechanical engineering. Did a few things actually with that firm including a new business actually in the Far East and I left to join a consulting company down in London; a small boutique consulting company, which specialised in change management. Then I went to do an MBA, as you probably know. Oh yes, I did a project with Deloitte Consulting as well for the financial services sector; an M&A project. After the MBA it's Abbey National in the Strategy Department, as you probably know, in link with quite a few projects actually Internet-related as well as non-Internet related primarily at a strategic level, but it's not really operational. That's about it actually.
5. **GS – Right. You said you were both involved in Internet related and non-Internet related projects. This is quite an interesting experience regarding a few things that I would like to discuss with you...**
6. CW – I wouldn't call it "Internet-related" actually; I would call it "e-banking related". I think Internet-related is a broad category.
7. **GS – Right, I see. Would you like to tell me a few things about your experience behind the reasoning and the rationale behind the decisions to launch e-banking at Abbey National back then, and how this rationale has – if it has – changed through time.**
8. CW – OK. My specific steer is actually on Abbey National; although I've got a few material which I thought you would find useful as well, actually. My brother worked for Andersen, currently Accenture, in the financial services sector as well, so a lot of my background about e-banking comes from a lot of material that have come from Accenture anyway. That was operational in specific on the technology of launching the standalone Internet banking, is to capture the emerging trend; now, the beginning of which takes a lot of convincing because Abbey National is very

short-term focused, based on a quarterly basis to justify Internet banking or e-banking; that was very difficult at that time; that's the impression I get from when it started out. Justification is *not* by the financials by that point in time; it's based on what competitors have done, and competitors move so we have to move and be a quick follower. That is a very clear type of strategy, explicit strategy that we have, I would say, and Abbey National are adopting. So, the justification of investments is not based on financials but on the need to do that.

9. **GS – So in fact it is a “now-or-never” project?**
10. CW – I wouldn't say “now-or-never”; we can do it there and then or we can do it six months later. They know they *have* to do it, but finding the right time; let someone else try it first and then jump the wagon.
11. **GS – This decision of doing it now or postponing for later, is it *purely* strategic?**
12. CW – Purely strategic, and it's purely, as I mentioned before actually, the term we use is “quick follower”. You need to be a leader or you need to be a quick follower. So maybe a month or two later we do it. So, that is the decision. By the time we launched obviously, Abbey National also launched in-house e-banking as well; the two took off simultaneously, however, the infrastructure, the backbones are similar; so we used the same backbone. However we never integrated the two backbones until very recently, and integrated that engine behind the processing.
13. **GS – Why would you say this happened? I mean the late integration; how did that come?**
14. CW – The main reason is actually the... what is the name actually? Can you remember? The Internet banking type that Abbey National launched?
15. **GS – I can't really remember the name of it. {CAHOOT}**
16. CW – It started off as a new venture, from the parent business. That gave the management and the MD a more free hand to do whatever they would like to do and cost-wise also separately; it makes more sense now, especially in the cost-cutting environment to merge the operations. So operations are merged, however, the customer facing, customer acquisition and retention are done separately, so there is no sharing of the database at the customer front; but not the processing, which was for cost-purpose actually.
17. **GS – Right; do, recently, you said, this integration took place. Would you say that this was because the whole technology and the whole thing gained momentum, and the company thought that ‘yes, it works perfectly well, so it is good if we integrate our databases and everything’, or was it a different reason?**
18. CW – I wouldn't say we actually integrated the database; the actual database behind it. However, the customer data, it's not integrated in a sense; it's not a single view whereby Abbey National bank cannot view the customer of that Internet Bank. However, the processing are going into the same house for processing; so, we took advantage of economies of scale for processing. But the customer-facing elements of the knowledge base, or the customer knowledge base are still very much separate. Essentially, it's driven by cost and Abbey is in deep trouble even now; it's its first loss since it's gone public actually; its IPO. I don't know how much you've heard of these news actually; it has only come out two weeks ago; the CEO announced the first loss ever. I knew that pretty well already because I knew their

finances quite well and that it was not sustainable. So they have to cut costs everywhere.

19. **GS – It was again very interesting that you said that the justification was definitely not financial. Of course, definitely there were some finances behind it, some type of investment appraisal for that; was the justification to do it or not to do it purely strategic? You said ‘we’re going to do it now’. The justification for the path to follow in the sense of... first of all, were there different competing projects for the implementation of Internet banking back then?**
20. CW – Absolutely. Absolutely, I think when the Internet banking was launched there were obviously competing projects. The one was actually the CRM project that Abbey National was considering at that time; however, if they were to take it on, they overstretched the IT department, so the CRM as far as Abbey National was concerned, in Abbey National’s terms, was ICCM, which was Integrated Customer Contact Management. So, they don’t want to use CRM; they used ICCM. And then they said “well, Internet banking is since day 1 to be a quick follower, we do that first and then put ICCM later”. So, it’s after they launched that thing that ICCM started to take shape. So, now they will probably have started using the ICCM, which is a single view on the customer. This is really managing all the customer database into one view, whichever channel they go to. However, it’s not really true. At the moment, you’ll be pleased to actually know that the Internet customer databases are not yet integrated with the branch-based channel. Now, only the telephone and the branch are integrated. So Internet transactions, you will not get a single view of all the transactions; it’s limited in some sense. I am not sure if it’s a technology issue; I think it is not a technology issue, because we know we cannot swallow the integration all in one go; I think the second phase of ICCM or CRM is to integrate the Internet customer, as well as IDTV.
21. **GS – I see. Now, going back to the financials, were these issues somehow taken into account or costed as a loss or – the other way around – as a benefit, when the whole project started taking shape? Or were these some issues that came out later?**
22. CW – No, in fact they were struggling with IT capability or capacity rather. We don’t have the sufficient in-house capability to do that. Now, whether to do it using outside help or outside sources, I am sure it is one viable option, but it could be too costly for them. If I understand correctly, the NPV numbers for e-banking, for the separate e-banking, were...how can I put this?...manipulated to make it look positive. However, the rationale behind is still strategic: it’s making the numbers look positive and then a lot of which have a strategic rationale behind them.
23. **GS – So actually the NPV and the overall financial part was used, in a sense, shall I say just because they were in the list and they had to show somehow sanguine or viable?**
24. CW – That’s right; yes.
25. **GS – That is very usual! All the more I am finding that this kind of manipulation is usual to happen, especially for strategic decisions. And what you’ve touched on actually is my next question regarding the role of the Finance function in the overall decision, and the issue of the use of financial tools as a convincing instrument rather than as an appraising tool; would you say that this was the case?**
26. CW – I don’t think it is used as a driver to justify it; but certainly that investment appraisal should not show a loss. If there was a negative NPV proposition, that



wouldn't definitely go ahead. For the more, I think, uptake from the Internet user and the sort of cost savings side of it, where the benefits are coming from cost savings are all clear-cut at that stage. So nobody actually really knows what the numbers ought to be; but we now know we actually saved more on the cost side but that we do not really attract on the revenue side. The cost side is very very easy actually; we managed to convert or migrate our customers to Internet-using – into using the Internet. That saves us lots of costs actually, but the revenue, at the moment, never came through; not near meeting the budget actually.

27. **GS – Right; so, actually, the revenues that Abbey National was expecting from the implementation of Internet banking, you said that these were based on customer acquisition?**
28. CW – Of course it has come from that too actually: customer acquisitions. And cost reduction. So, they managed to meet the cost reduction but not the acquisitions front. Because there's a little bit of... they have distinguished between new customer acquisitions and basically migration of existing customers. A lot of these are migrations rather than new customers.
29. **GS – Yes. That actually takes me to the whole, you know, mechanics of the Investment Appraisal; would you say that there is – or there was, back then when this was done – a suitable, if you like, or viable way to kind of measure the [customer] acquisitions that can be attributed to this new channel, the Internet?**
30. CW – Yes, they can actually. Because when a new customer registers with us, Abbey National over the Internet, that customer would be matched against the existing database, whether he's a new customer; if not, then we need to take a lot more information. And I think the process makes it easier for registration if you're an existing customer, then you fill in less information; if it's a totally new customer then you need to fill in a lot more about your customer database. So existing customers fill in a limited number of information and then somebody else will actually fill in the rest of it. It's not really automated, but somebody else will look after it.
31. **GS – I see, but, on the other hand, has there been some kind of post-implementation review to see whether these new customers are using the Internet channel only, or whether they're contributing to the creation of additional volumes of traffic, if you like, to the call centres or to the branches? Because, as far as I know from my limited experience, a customer that joins a bank is – unless this bank does not offer another service – wishes to make the full use of all the available...**
32. CW – You're talking about channels, yes? You're talking about cross-using different channels or multiple products? Which one is it, multiple channels or multiple products?
33. **GS – Well, I tend to see these two as both; in the existing state of contemporary banking, still some products are linked to the channel. Take for example e-savings, or take for example other financial products like mutual funds or some particular kinds of checking accounts or whatever other kind of financial product, which are not yet offered through the Internet channel. But as soon as a customer becomes your customer, then you definitely as a bank want to have his custom, whatever channel he or she is using; so, in that sense, I'm seeing these two as both.**
34. CW – OK. I can tell you actually my view on Abbey National. You see, what is happening here – because the databases are not integrated anyway between the

branch and telephone database – so, it's difficult to actually, say, to cross over to another channel in a sense; wherever. If you look at what we call cross-holding of various products, the Internet customer tends to have much higher cross-holdings of products. This means that you have more products compared to traditional customers; traditional customers in Abbey National have 1,9 products; the traditional branch-based customer holds on average 1,9 products. For Internet customers, it's near 3,4 which is really the highest of, in fact, all competitors that I know actually. So... it's not actually down to because they can actually go to the branch or what; because over the Net, ...{pause}... the e-banking services offer a range of products, normally; I think in our case it begins from a current account and then there is e-savers, which is the best rate, and then you can do your mortgage on it, and then you can get loans on it; so they actually extend the product range over the Internet and hence increase the product holding of a customer over the Net. Whether they actually use, for example, they go to the branch to use the service, if they understand *correctly* the charges and the lower fees, stop them or prevent them from doing that. They can either access through telephone or Internet, which have a lower rate. At this point I remembered that the bank name is actually Cahoot. Now, Cahoot wasn't really among the first... the rise of Cahoot is actually driven by Egg primarily. Smile and Egg started first, which were two standalone Internet banks and hence Abbey National felt the need to do that; this is why they created Cahoot...

35. **GS – Sorry to interrupt you; when you first asked me what was the name of the service that was launched separately, were you referring to Cahoot?**
36. CW – Yes.
37. **GS – Ah right; because I got the impression that we were talking purely about the Abbey National branded Internet banking.**
38. CW – Abbey National branded Internet bank is the one I told you actually; the separate one is actually Cahoot, which is Abbey National anyway. This was under separate management.
39. **GS – Right. Sorry, you were saying something when I interrupted you...**
40. CW – I forgot it actually {laugh}... it will come to me later... I was going to tell you about the Lotus ... actually; the Lotus is coming from Abbey National and is a very interesting product actually. It was the single view of all your transactions; because of this increased cross-holding of that, you are able to see current accounts, saving accounts, all in one page as a single consolidated statement view and things like that. Citibank did the same obviously, and they vended it through account aggregation; Abbey National would never go for that, and chose to so it in-house, so it's got all the products put in one page. That's about it. And now Abbey National extends the product services into fund management so it's even more... essentially it's trying to cross sell more products to... actually up-sell to one customer; up-selling and cross-selling as well.
41. **GS – It the type of products that are being sold over the branch network, over the phone network and over the Internet, are these more or less the same?**
42. CW – It will be different products actually. If you take ISA for instance, you can buy an ISA through a branch at one rate, you can do it through post, which is higher rate, you can do it through telephone and through the Internet for a different rate.
43. **GS – But it's the same product in fact.**

44. CW – Yes, different channel. The features, I am not sure if they're the same, but customers pay more attention to the rate. I do not read the small print, so I do not know what are the different features of the product.
45. **GS – Well, actually, where I am getting at by asking this question, is that I am trying to identify whether this kind of lack of integration between the databases and between the... {pause} between the different channels, if you like, causes some kind of loss in terms of new customers, or old customers who wish to buy into a new product. In that sense, do you see that this is something that happens?**
46. CW – I think this is the common sense; every management knows that, but they can't do so many projects in one time. That is why it has been put on hold. Everybody knows actually that if you've got...you know... it's something they already know; what is stopping them actually in this case is that some rates relation changes as well, and all Internet, all IT guys have to adapt the systems to account for that; can't remember what is the latest one... regulations change every time, so just purely dealing with IT changes for regulation purposes.
47. **GS – Right. Let me just briefly go back to a question that I asked before we got involved in talking about something else. Is there a post-implementation review in place for Internet banking?**
48. CW – That's a good one actually. As far as I know, no. Cahoot yes; not Abbey National branded Internet bank. Cahoot yes, because Cahoot is run separately, if I understand correctly by the time I left. By the time I left, Cahoot hasn't really breakeven. The reason I know that is that there was a 'post-mortem' analysis on that is to track when Abbey will break even on that investment. I wouldn't anticipate it to breakeven sooner anyway, because it doesn't have the volume in place.
49. **GS – Right;**
50. CW – Abbey National there isn't actually {a PIR}; the reason that I know that is because there are three Strategy managers the time I was working there, one of which actually was in the E-Commerce Strategy side of it; by the time when I was there, that was the first time he reviewed Internet propositions; that's how I come to know a lot of the indicators which was behind a lot of the cost... we are hitting in terms of cost while revenues fall behind target suddenly... but that was the only time; there's no regular tracking of the performance or any KPIs {Key Performance Indicators} or any kind of full reporting system.
51. **GS – What would you say is the reason behind that?**
52. CW – I do not know to be honest; I thought it is pretty common sense coming from my actual consulting background. Nowadays, they simply don't do it; a lot of things that they... I'm shocked with... the one thing I understand is that Abbey National work in a very informal basis; if you think about strategy, a lot of which is in people's heads rather than explicitly written down...err...so, a lot of the decisions are taken at a senior management {level} without being written down, passed on or communicated to anyone actually. So... {pause} perhaps I think, perhaps the true reason – I'm only guessing here at the moment – is that they are afraid of showing the numbers that are behind or they already know it, what is behind, and they don't want to know it basically...
53. **GS – They don't want to formalise it or something like that?**
54. CW – Yes, no formalisations...

55. **GS – It's interesting that there is no... I know that as far as you've just said, there is no formal post implementation review process in place for the Internet banking...**
56. CW – Abbey National, not Cahoot.
57. **GS – Abbey National, yes. Well, is there a case for this PIR in other projects?**
58. CW – Yes, there is actually. For instance, ICCM project, which is a CRM project, there's a full separate team to handle that and there is a monthly review on that... all indicators; it's basically a scorecard system they do, which is not the case in Internet banking; I don't know why it was set up that late, but certainly there isn't... no.
59. **GS – Is it a separate department that is running these projects?**
60. CW – ICCM?
61. **GS – ICCM and Internet banking.**
62. CW – Oh yes, there is actually; there's a project which we call Change Management, the Programme Management Office which handles all new programmes, which is all new projects. So, ICCM is still under Programme Management; in fact Cahoot split off from Programme Management into a separate identity from Abbey National itself; Abbey National retail banking. And then the Internet banking, since the Programme Management... {pause} initially it was actually under Programme Management up to when it was launched, and then it goes under a fairly big department to manage the operations; but I think the operations data for example, how many uptime, downtime hours are monitored but not from a financial point; but one do not reveal the return on a financial investment, whether that has been really on track; but operations data are being revealed.
63. **GS – Right; that's very interesting. As far as I can see, it's interesting what you said, that it's a big department that is responsible for the PIR or checking the functionality of the whole Internet banking system; it should be that the complexity within a big department is a lot higher than within a small department; so, that might be a reason for something being neglected or being left aside...**
64. CW – One of the stretching points actually on Abbey National is that the Programme Management Team are overstretched already, so they can't really do too many projects; they're doing a lot of things already; that might be a reason why they're not tracking it; there's no specific teams to track the Internet banking performance or whether it provides the returns that it should. Or it could be perhaps that there's no commitment from the top down, saying "well, we're putting money in, so we would like to know how it goes". Essentially it is down to politics anyway. The two top men actually in Abbey National Bank, one is the MD who has recently resigned; only two weeks ago he resigned, and then the next day the profit warning comes up. So... the second man is actually the E-Commerce Director, also the Strategy Director; now, he's the man; since he's in charge, nobody wants to step onto his toe and say "look here, this is how it should work" or something like that.
65. **GS – Yes, it always gets down to politics; I know. I'd like to move on a bit to more investment appraisal specific questions. And the first one I would like to ask is, when you're talking about a new project, a new venture or product or whatever, there is always some kind of cost-benefit kind of analysis.**



**Would you say that, in the case of Abbey National, from your experience, the identification of costs and benefits and their actual evaluation, were these two separate? Were they run by different people, or was this something that was seen as an integrated procedure?**

66. CW – Can you say that again? Integrated between what?
67. **GS – Well, the identification and the evaluation; these two things. Because at the first stage what you would normally do is to identify which are the potential costs and benefits, and, at a second stage, normally you would try to evaluate them; in financial or strategic or whatever sense. So, identification is one thing, evaluation is another. Were these two done from the same people? Within the same group? Or were they seen as separate things?**
68. CW – They *are* separate; however there is still linkage. A lot of the identifications are done at the strategic department, by the Strategy Department, which is doing to identify what do we need to do. They set the identification; the latest one is for example IDTV... no, sorry, the latest one is 3G, which actually an Abbey National partner arranged to do and launch that, hopefully this year... I'm not sure; I haven't heard anything about it yet on the paper. Now, just identification is done by the Strategy Department and if they identify the need they pass on the thing onto the Finance Department to put some numbers to it; although they can justify the strategy rationale behind it, the numbers still have to come from the Finance Department; because there is a spreadsheet or ... some sort of template... {pause} It is not exactly an NPV type of spreadsheet but *we know* how we would like to hit our target in top as well as bottom lines. There are certain drivers in the spreadsheet to do that. So we just have to change... if we can increase 10% of *this*, and reduce 10% of the cost and this and that, this would generate a new financial outlook for the company; for the Retail Divisions. So, it's actually manipulating these numbers and saying... basically it is some sort of doing the testing and say 'if we can increase by this and that...' and then verify that, and then say "OK, well,...". It's actually a bit of interactions; there's only one person from the Strategy Department and then a lot of people from the Finance Department trying to work this thing out. They say "well, we think we are likely to increase customers by this margin, we're likely to acquire new customers, we are likely to do this and that" and then they will put into the financial spreadsheet to do that modelling in a way; and then if that is tested and it looks better, essentially it is driven towards... for the year really; we would like to attract customers or we'd like to use that as soon as possible, so that we can actually see what changes or what impact you have on your financial statement by the end of the year. That is done in every project, but it takes a bit longer to check if its NPV is positive etc...
69. **GS – I see; is there an input from the Finance team regarding the identification of costs and benefits? The way you described it, it seemed to me – and correct me if I'm wrong – as if there is some kind of a linear process whereby there is a Strategic group that decides which are the potential costs and benefits and then this is passed-on to the next 'box' if you like – if you think of it in terms of a diagram – which is the Finance team with the participation of one person as you said, or one representative, from the Strategy team, and they kind of work it out there. But there is no feedback loop from the second box to the first box... in terms of identification I mean.**
70. CW – OK, identification; I think the answer is 'no'. I did a lot of external analysis in order to know when an estimate changes and when one is coming... what do we need to do, there we have some input from Finance. However, having said that, a lot of the Strategy managers, in fact two of my colleagues come from the Finance department and they are fairly clear... they're very sound in terms of Finance and

they know... There's a lot of cross-fertilisations actually and a lot of people come from one place and go to other places to do this and that. However, I think, identification is still very much a Strategy work and whenever we come to do Financial modelling there is Strategy input to that. If there's a 'no-go', if it doesn't seem OK then we drop that or come to review it later. In the case of IDTV, there were numerous times of dropping it and taking it up again; it was very difficult to justify IDTV as it was costly. I 'm not sure if you actually know... Egg actually dropped IDTV propositions altogether; Abbey National just plans to drop one of the IDTV services as well, so we've got two or three ... TeleWest is one of them... we've got another alliance because of the return; not in terms of financial return because if there's no take up, there's no customer actually through that... it's sufficient to have one or two IDTV services. So, in that case perhaps it's in the numbers game ... the two together.

71. **GS – Right. Speaking of costs and benefits in IT projects, especially e-banking, regarding the unanticipated costs and benefits, what is your experience there? I mean were there any costs or benefits that were not in the initial plan and they just cropped up during the implementation of the project?**
72. CW – That is very common actually. I'm not sure it is like it was never there; I think it *is* there but we underestimated or, in a lot of cases, for example in a programme management, we underestimate – because a lot of the technology is fairly new to Abbey National perhaps and to the whole sector itself; we underestimate the complexity of which it is to be carried out. Now, a lot of programmes... I have never seen a Programme Manager actually being on track and on time, the time I was in Abbey National. The typical one, which is a project to integrate the mortgage customers into other customers, it was delayed by 18 months already before it's gone into implementation. And the ICCM, the CRM project which, in a way, should ideally link to the Internet already, again is still behind. The e-banking, Cahoot, was supposed to be launched almost the same time as Egg, but it was actually... let me just check how far behind... {it was supposed to go} a few months behind Egg, but they were already into a different year. So, that doesn't... all is actually down to us being – how do I put it – awfully confident to what we can do basically, and then fall behind.
73. It was certainly not about missing out elements but we underestimated the complexity or overestimated our ability to do it. Another case is actually the outsourcing of all the transactions that we have, the credit card transactions, whether through the Internet or not, we outsource it to EDS. The project is a flop from the very beginning until now; we're still pumping money into it and it should have been completed months and months ago. So one do never know how the real scale of the project develops. That's what I've heard actually; I do not know whether there are any elements missing. As far as I know, in terms of the ICCM project, our CRM project, programme management, they began developing the solution already and then I was asked to conduct a risk assessment, 'what is the risk if we don't do it on time'. They should have thought about that really well before they started, but if you don't do it on time, the downside can be really hard on the Finance; on meeting the target; my finding was exactly that and this time they're definitely not hitting the target and as we've seen two weeks ago on their profit warnings. So, if that anticipation, which is the anticipation of the complexity, the anticipation of the pitfalls when things were not really thought so properly.
74. **GS – Right, so it's actually more or less IT-related in terms of knowledge and time.**
75. CW – Yes. There's another one actually which is non-IT related. We now have this fantastic ICCM, this fantastic single view of the customer. 'So what?' is my question. With this fantastic technology, now we can see a single view of this and

that. But we don't have a Strategy; we do not have a plan as to how to use it now. So what do we do with this? That is the question. We do not have an integrated channel management. We do not have integrated product management as well. We do not know how to cross-sell at the moment; we do not know how to up-sell within that system. We have that system already but... so what? I am sure it's probably not the same in RBS. They're fantastic. They seemed to know exactly what they want to do now.

76. **GS – Yes, actually they start more or less – because I've been talking to them – the other way round; from justifying the need for something before they kick off...**
77. CW – They put a lot of time and effort into planning, and then execute it very carefully. We put a lot of time in discussing – but not really planning – and then execution takes longer time, and we still don't know what to do with it. They're a brilliant company.
78. **GS – Speaking of unanticipated things, have you seen any unanticipated benefits?**
79. CW – I think we underestimate in terms of costs savings. We are surprised actually that a lot of customers *do* migrate to Internet banking; if they do this transaction through the Internet, the cost is a few pence compared to tens of pence per transaction in the branch; so that is a big big benefit that we underestimate. Otherwise we wouldn't have overshoot our target. So, I think that's partly because we're not sure about what actually to put in, to put some numbers into it to make the financial case and, on reflection, I think perhaps we are too conservative for the numbers on the cost-cutting side.
80. **GS – Right; so what you're saying is that you actually had real migration.**
81. CW – Real migration, yes. From branch to Internet.
82. **GS – Because, from my experience, by speaking to a considerable number of financial institutions, they share the same experience, which is that the Internet channel has not actually caused a total migration - well, not total but full migration – but rather it generated some new volume, or, you know, worked as an added channel rather than an exclusive channel, if you like.**
83. CW – They would say that because they wouldn't like to say that they sabotaged their channels. They wouldn't say that they have taken volume from another channel. In our case, which is that we take customers from another channel and then plug them in the e-banking channel. That doesn't mean that we don't attract new customers, but in terms of transactions, a lot of them {customers} are Internet savvy. I've got a number somewhere that I can pass on to you.
84. **GS – That would be very interesting actually, regarding the migration issues. Let me know talk about the role of the financial tools themselves, you know, the NPVs and the IRRs and the Paybacks and all these. How would you say you see these tools work for the purpose that they're there for?**
85. CW – {pause}...it is just a game actually. It's not... I know very well that it is actually strategic rationale. I know the tools, if anything at all, would be secondary to justifying an investment or investment project. They are secondary. A lot of these are still strategic in nature. Having said that, I am not sure whether this is actually because we're doing something fairly new anyway. We're sort of close to pioneering the industry. For example, in 3G I am sure, apart from Abbey National there's only Egg; nobody else are doing 3G at the moment. IDTV, apart from Egg



and Abbey National, it's HSBC and nobody else do it. So, it's that uncertain, that whatever number we put in, nobody is going to ever commit to it; nobody really understands whether this is going to turn up. And based on that, strategy becomes more important; I think for a very good reason in this case, if one is certain about what it is going to pan out, then the financials would make a lot more sense; but not in this case.

86. **GS – Again, leading from what you just said, is there an effort at all to look into methods that are more...well, I don't like to use the word 'sophisticated', but I'd like to use the term, if you like 'IT-specific' or... the one thing that comes in mind and it is one of the methods I am looking into, is the Real Options Valuation (ROV) which is a more strategic tool, but it's based on options pricing. Is Abbey National looking at all at such methods?**
87. CW – The answer is yes. There's one person to which I've spoken to and he told me he's developing a tool to evaluate the feasibility of a piece of new technology for Abbey National. This chap is basically the Abbey National Technology Strategy person. He actually evaluates all new technologies like biometrics technologies and the like. So, he said there is no way that you can put out in cash whatever it is. I don't know if he uses some sort of options method. We seem to have developed something sophisticated; I am not sure how well, but that is not his strength. His strength is that he actually knows technology; so whatever he developed, I haven't had the chance to look at. Yes, I think that even Abbey National has explored alternative investment appraisal as such, however at a very lower level; strategic level; so, this guy is just playing around with different kits and different tools. Yes, I think it would be useful if there is an alternative to real cash flow projections.
88. **GS – Right. It would be really interesting to talk to this chap actually.**
89. CW – I forgot his name. It just skipped my brain!
90. **GS – {laugh} OK, I'll probably remind you later. Now, it is really interesting what you said about people playing around with something to see if it is worthwhile and so on...**
91. CW – I think he spoke to a University about help on that; he has been in contact with a lot of Universities anyway to keep an eye on new technologies that are coming up. We are thinking about biometrics; certainly Abbey National is at the forefront at the moment. And it's Bluetooth technology. Now, how do we deploy it actually? It's coming up very very quickly; how do we put that into e-banking – that is actually the term Abbey National uses, rather than Internet Banking. So, we have tried everything already: WAP phones, IDTV, everything basically; so this is what is next coming up.
92. **GS – I see. Going back to my question. From my experience, I've seen that banks and financial institutions are not really putting any real effort into trying to develop something new or trying to adopt something different than the NPV, IRR and all the traditional financial methods and so on. Would you say that this is because they believe it is not worthwhile to put resources on research for that, or is there a wider belief that everything cannot be quantified or that the whole thing is a guesswork game?**
93. CW – I'd be lying if I said I know, because I'm not in the Finance area. I don't really know the real reasons. Perhaps there is no understanding of alternatives basically. I'm not sure how many of them know Real Options or options valuations.
94. **GS – Right. Regarding quantifying intangibles, there is actually a list of things - I think they were in my email – that are very important at the**



strategic level, and even at the financial level they become the actual drivers for profit in such ventures like Internet Banking; things like customer trust, error minimisation or security or the rationalisation of systems and so on. All these, are they things that are taken into account in your experience, or are they just words in the justification?

95. CW – They're just words actually; there's nothing in the financial numbers. There's no intangibility in the finance.
96. **GS – What would you say is the role of reporting, of the reporting mechanisms? I mean the relation between the reporting mechanism and the appraisal mechanism... if you know what I mean. As we probably all know, it's shareholder wealth that actually drives the very existence of the company, and because the financial status of the company is disclosed through the financial statements, this reporting mechanism is what actually matters as regards the outside view; the view to the outer world. Would you say that the reporting practice has a direct effect on the appraisal practice of different projects?**
97. CW – Most certainly actually. Most certainly, especially in the Abbey National case. I have actually proposed quite a few things to look at. We say that, if it is beyond a two years horizon, let's forget it actually, and review it a year later. So, everything is driven by whether we can outperform our current budget the next one year hopefully or two years max. So they are financially driven and we use these as a first test; so it's which driver to profitability we can impact on. Yes, that's financially driven; that's number one. And in fact, that is actually the crust of evaluation. However actually, in terms of reporting, we have this monthly scorecard report; a lot of indicators are not finance related; it's actually the same as 'four-perspectives'; actually Abbey National have its own 'four perspectives'; there's the customer, there's the operations, obviously there's some Finance into it but I never came across 'trust' or things like that. No. In there, there is a Programme Management of this, which means how many projects are on track and things like that, but I am not sure... I have not seen things like whether you have got return on track, because we don't track the return; we track whether the projects are on time or not. Perhaps that is a weakness itself. We need to create one which is for post-mortem analysis on new projects, on whether they return or not, but there's no such KPI or performance matrix in the scorecard. That would be a good idea.
98. **GS – Yes, I see. Actually what I was leading this to, is the issue of short-termism.**
99. CW – It is actually. If you come to Finance, nobody talks about even more than a year. My boss doesn't want me to tell him "What about next year?" It's "tell me about this year!" {laugh}.
100. **GS – Yes, yes I see. It's alive {laugh}, short-termism. Right, no, it's something that you see just everywhere. I was just interested to know your view. Right. I am aware of the time; just wanted to ask you just a few things about Knowledge Management and Knowledge Assets, and whether and how they are integrated into – well, not solely the investment appraisal process, but – in the overall evaluation. Is Knowledge Management something that comes into, first of all, any of the finances at all?**
101. CW – The answer is 'no'. It doesn't come into any of the finances. I can tell you because I am actually outside the company now. If I was coming from inside, I wouldn't say that actually. I wouldn't even say that KM is not important! But, in reality, I was asked to do a project actually on selling to the management – senior management and middle management – Knowledge Management. Now, the

Abbey National Corporate would like to introduce KM across, and I was the co-ordinator at the time, to co-ordinate this with the HQ; now, I went and did a proposal on how we could actually utilise or deploy or employ KM techniques across Retail Divisions; I went to the Board of Directors, explained how and what are the benefits, and they said "yeah yeah yeah fine... let's go the second agenda..." So, there's no commitment whatsoever; they feel that this is something nice to have but 'so what?' So, it is not there basically; and for the middle management it is another project; another thing to do. So, they see this as another add-on. It's very difficult for them to see it actually as a part of, or perhaps enhancement to, what they're already doing. And my boss, who is actually the Strategy Director and the E-Commerce Director said "look, perhaps it's not the right or the best time, because everyone is under pressure to deliver". So, we kind of put it aside, and KM is actually now in the freezer.

102. **GS – Right, I see. I mean, there are issues like valuation of Knowledge Assets or Knowledge Assets accounting, I'm sure you've heard of that...**
103. CW – Accounting I am not quite sure actually, in terms of really managing knowledge within the company. Accounting ways, I am not sure actually; if you look at our financials I do not see anything like that actually.
104. **GS – No, it's actually the issue of the need for some kind of separate additional type of Knowledge Assets balance sheet, if you like, to give a different perspective to the value of knowledge of the company, because especially in IT-related ventures, well... one of the things that IT is best to deliver is Knowledge Management, although you don't really see it in practice. Do you see any role for Internet Banking in facilitating KM? I.e. as a source or a channel of KM...**
105. CW – In my view, no. Because what really matters is 'do you acquire new customers?' What really matters is if it actually serves the bottom line. What is it going to do actually when it's up and running? So what? We really need to think about how do we utilise customer information, if that's what we call Customer Information Management or CRM or Customer Knowledge Management. But do we want or do we need to separately measure the knowledge that we have on the customer and put an index to it? We have to have a strategy in place, and we have to have an output indicator in place, and say "look, we now have to enquire this customer and have to update the cross-product holding". If we manage to do it then we measure the output and we measure how much knowledge we have in house and index on it.
106. **GS – Yes, I see what you mean in that respect. Right. One final question is regarding the relation between Internet banking as either a new way of doing banking or a new way of manipulating data, if you like, for the financial institution. Strategically, do you see a role for Internet banking in some type of financial engineering? Do you believe that there is the case for designing and delivering new products by using the Internet channel?**
107. CW – Mm, I think it is not possible at this stage. The reason is that there is this... Internet channel, yes there is actually... there's one regulation change which is polarisations and depolarisations, which means that now you can sell many products actually... anybody else's products... Abbey National can sell Barclays' products, it can sell anyone's products on the basis of what is the best product. So in that case, they actually transform the marketplace, in a sense. However, the product will still be similar, because the products are regulated products. So, whether you could invent a new product, the answer is yes, because, for example, in the case of Woolwich or in the case of Intelligent Finance they developed a new product where you can actually offset... it's actually offsetting accounts. That is to

me a new product. Now, why can't traditional banks do it, because, apart from the infrastructure, it is actually margin minimisations; so, yes, I think there are chances to create new products through the Internet. It is actually part of the Internet and perhaps the IT infrastructure behind it. Now, Barclays cannot do it without having Woolwich technology, so Barclays have now the Open Account, which is offsetting as well. So a lot of these actually are down to IT as well, but banking, I think, there is actually, for example in the case of Citibank, account aggregation; I think it's - I wouldn't call it a new product - but it's a new service to the consumer. There's no demand at the moment. Yes, I think there are opportunities for that to happen.

108. **GS – OK. Right. I don't want to take more of your time! {laugh} I've had my hour. That was really interesting. One last thing that I wanted to ask you is, from all this discussion that we had, would you say that there is some area or some specific issues in Internet banking that I am missing out? That I am not looking into?**
109. CW – I am not sure what your topic is, Internet banking or e-banking...
110. **GS – Well, it's Internet banking.**
111. CW – Right. You don't want to do anything on 3g, WAP, IDTV...
112. **GS – No, I am actually narrowing things down because the PhD is a limited piece of work.**
113. CW – I can tell you this actually: Internet banking is dying, in my view, because that is too limited. Everybody realised that already. And in fact, if you remember, I think, a year or 18 months ago, Lloyds Bank said they wanted to develop separate banking just like Cahoot, Evolve Bank; that has just gone dead. The trend – everybody seems to agree now – is actually multi-channel access strategy; So, if you want to talk about purely Internet banking, I am not sure you will actually survive until tomorrow. I think it would be best to make yourself related to e-banking which is about access to more channels. Cahoot started off with the idea but the business model actually changed when they started they just wanted to be an Internet bank, because at the start, when Abbey National adopted Internet banking, the volume was really high and they thought "well, perhaps we can actually do a separate stream for that". It turned out to be a kind of flop, so Cahoot now has all kinds of channels. Now, Cahoot actually uses the Post Office for its branch, rather than using Abbey National. So, I'm not sure whether a pure Internet bank could survive actually. Perhaps, when you justify the finance, or the financial perspective of it, you couldn't do it without the support of other channels. Or perhaps you couldn't do it without the cost reduction for other channels. So, it is a bit of, how do I put it, if you try and justify an Internet bank as a standalone, I don't think that would be sufficient in terms of finance benefits from it.
114. **GS – Right. That's an interesting view. I should bear that in mind...**
115. CW – From all surveys conducted by Abbey National or the sort of reports in the market, the customer doesn't want an Internet bank. So, let's be honest about it. All the surveys indicate that the customer doesn't want Internet banking. They want multi-channel access. So, and from there, no one can justify another Internet bank, so...
116. **GS – So, it's actually that the focus and the weight is put on service delivery rather than the specific channel for service delivery. Is that what you're saying? It's the service delivery itself when you talk about multi-channel access; that the customers are interested in having access to their finances, regardless of where they are; things like 3G, m-banking, IDTV and so on.**



117. CW – Well, it seems from the surveys that television is actually a flop; so probably the mobile telephone will be the next big thing after Internet. Now, there is another point that I would like to mention to you: perhaps you would like to look at the e-market, which is at an early stage at the moment. I wouldn't say actually at such an early stage, because Barclays have got a few B2B Internet Banking offerings, not for the retail customer, just B2B. A lot of these are actually underdeveloped and it's an underserved market. I feel that there is a lot of potential still for Internet banking for business. Yes, I think it is in that sense. I am not sure you have... just hold on a second... I have a few names that perhaps you can contact. Do you know that Barclays and HSBC come together to form this Identrus? It's a consortium of financial institutions to provide platforms for orders, trusted third party or transactions over the Internet.
118. **GS – Right; no I haven't heard of it.**
119. CW – It's a B2B initiative. And Barclays themselves have got their own B2B trading platform; it's actually Internet banking for the business customers. I think they have acquired some kind of Applications Service Provider to help them do that. Now it's {Barclays} got its own. And I am not sure what this is going to evolve to, because, from what I see at the moment, everybody seems to have one of their own. I think the model in the future is actually some sort of consortium approach. For example there's one on Exchange Holding or B-finance; all these are B2B or Internet service financial service offerings. I think that part of it is actually underdeveloped and underserved.
120. **GS – Right. I know that sometimes these things are confidential, but would there be any kind of documentation, or any type of templates that you would be able to disclose to me?**
121. CW – I will change the numbers actually...
122. **GS – Yes, by all means. I am not looking for numbers unless they are harmless {laugh}. So, I understand the issues of confidentiality behind these things. It's more the templates that I am interested in.**
123. CW – I will have to search actually. I do copy a directory from them. So, I'll first have to search whether there is any financial template.
124. **GS – Right. What I can do, is that I can send you an email to remind you. And I would really appreciate it if you could do that. The final thing is, are there any people that you would recommend I talk to in Abbey National?**
125. CW – They are two that I have in mind, but never got the time to go back to Milton Keynes whilst I'm here in Bradford. I've got a client here, that's why I am based here, to work with him. I will certainly go back for Christmas; if I can find them actually... I just need to find their contact number and give them a call to ask 'would you like to be contacted?'
126. **GS – That would be great. I mean, if you wouldn't mind, when I send you this email I will refer to that as well just to remind you, and if you can give me some names, that would be great. I mean, it would be really interested if you would remember this guy's name from Technology Strategy.**
127. CW – Yes....he's not very high level so he's accessible fairly quickly.



128. **GS – Sure! I am not looking for high-level people. My experience is that usually, the valuable information comes from people who are not very high up...**
129. **CW – Yes, high-level people have to keep the image of the company and wouldn't say things like...**
130. **GS – Yes, it's more the party line that you will get, rather than the real thing. Alright! So, I will send you a reminder one of these days, and we'll just follow up.**

**11. ROTHSCHILD & SONS PLC.**

11.1. Interview, 23/03/2001

1. **GS - My research is about investment appraisal in e-banking; I'm investigating the appraisal of investments of orgs banks or new entrants in to e-banking services technologies**
2. **KP - retail banking particularly?**
3. **GS - all sorts - my preference is for retail.**
4. **KP - By e-banking you mean transactions where money passes hands through electronic decisions as opposed to back office electronics ...**
5. **GS - Yes in this sense - I'm intending to deal with that part, which interacts, closer to the customer rather than the back office. That of course doesn't mean that these parts are different; all these systems are in such a way integrated that you cannot really separate them. So actually my investigation there is to compare the existing usual conventional methods used in investment appraisal and actually testing their usability in new technologies - specifically in the banking sector. So my thesis there is that it is not in fact the methods themselves but rather their use - how they're done through a wide range of organizations that I find not suitable for new tech, especially the ones that have to do with the internet; and there are 2 different schools of thought in that; from IS/IT discipline which actually focuses on the value basis of IT and from the finance, accounting & economics perspective which actually deals more at shareholder value. So my ultimate aim is to see how these methods and their use affects the decision-making in orgs; and ideally devise or come up with several conclusions regarding whether we can have a better framework - I thought your specialization would bring forward a very useful interaction. How would you feel about it?**
6. **KP - looking quickly at your script, I see you're adopting the approach of looking at case studies. Have you selected your cases yet?**
7. **GS - To be honest, not yet. All I've done is to have devised a categorisation of the sample and decided to do 6 cases: by splitting the sample into 3: incumbents, related entrants and unrelated entrants. And there are all different kinds of contingencies, which I realize I'll be faced with. First of all, there are several sensitivity issues, especially in orgs like banks see as and may well be confidential.**
8. **KP - What is the question you're trying to answer? Is there an academic proposition you're trying to test? What is your hypothesis?**
9. **GS - well there is not one pronounced as such. But if I wanted to make everything in terms of questions I would ask what is finally the best proxy - I don't think there is a best way - for appraising investments in new technology? Your approach as an investment specialist would be of great help.**
10. **KP - Well it is a lot that remains to be seen. I should say that Rothschild doesn't do any of the activities you're interested in. e-banking - particularly retail- is something that commercial banks obviously do and the new entrants. We advise a good number of these types of new entrants and so there are people here who can help you understand the way the decision making is done, which I guess is your area of interest; although I have to say straight away that this is not naturally me - I can put you in touch with people. But the issues (let me come to the methods later**

- because in some ways that's the least important part) for new entrants have always been sustainable margins & stickiness of customers. Sustainable margins meaning you buy these customers by offering these fantastic front-end deals where the fees are about zero - or they even pay money to join like the L&G (Legal & General) model and they're offering fantastic deals - loss leaders to get customers - and the big unresolved questions there are the sort of calculus about the profitability of new entries: will people stay with them or will just take the superdeal until it's not there anymore;
11. and they immediately transfer somewhere else; which they call stickiness and sustainable margins if the idea is always to enter by deep discounting the fees they charge for the service and then pulling them up later when they've got market; and the 2 go together of course: as you pull up the margins to likely sustainable levels; if everybody immediately deserts you and goes & joins some other discounting firm, then the strategy doesn't work. Nearly all of the intensive commercial research that is done by these firms is about those issues: will people leave the foreclearers? Will they go back to them if we take away these fantastic superdeals? It's the same across the industry; it's not a retail phenomenon, because in the mortgage banking market, you know there's aggressive new entrants - some of them are electronic, some are not - they've got exactly the same issues; that they're bidding away business from the traditional mortgage banks and building societies and what even they don't know is when they try to restore margins because it's loss-making business at the moment; whether everyone will just go back to their traditional mortgage provider; it's more complicated of course in mortgage banking because people are not accustomed to moving around; they're not of course accustomed to moving around in retail either but it's quite easy to move around in retail, whereas to re-finance your mortgage, that's the proposition that people are stickier there in the sense that people are more reluctant to re-finance & move on is a stronger one, because it will take some sophistication and some courage to do that sort of thing.
  12. **GS - In the case of mortgages, is it something that people see as non-movable? I.e. that it goes with their bank? Is it a matter of product perception as well?**
  13. **KP** - yes but again nobody really knows. We're all peering into a fog of uncertainty because these are all new things; is whether people when they see that there's large sums of money to be saved the percentage savings from moving a retailed deposit from one current account to another are quite small, whereas if you re-finance the mortgage and get, say, 20 basis points on 150K mortgage, you're talking serious money; whilst on the one hand people have tended to just take out a mortgage and forget about it, the more sophisticated parts of the market understand that actually very small yield differences on a very large mortgage can be well worth having, so it's not that millions of people will move, but the valuable part of the market, which is the people who can afford to take out larger mortgages - precisely the people most likely to spot that particularly with internet mortgage banking it's quite easy to sit at home and in the commercials, in between their favourite TV programme, to screen all the offers that are available and move your mortgage; there's no pre-payment penalties and you can afford to do that and gain even in small margin differentials; and that's perceived as having a big impact to the market. If you talk to the building societies they'll say it's a very very big worry to them.
  14. **GS - Is it actually the same issue with customer loyalty in banking. The way I'm actually approaching this issue is: you can definitely have deals with more than one bank. What is the effect of the presence of a purely online bank to the market share of others? Is it more likely for people to migrate or just expand?**



15. **KP** – This is the big question. If you know the answer to that, [you know everything]. I don't think people know. It's very important what question you're asking, because I don't think personally that on a very large scale millions of customers are going to be at all interested in any of the things we're talking about; but this is not really the point. The margin, which is where all value is made or destroyed and there's no question that there are some very sophisticated people who are performing a new role of financial intermediaries, intermediating between static who will never move around and those opportunities which are out there; they're trying to take advantage and these are the incumbent commercial banks who outside their existing operations are hoping to cannibalise the deposit base of the other commercial banks – not their own of course. I think it's an interesting question whether the most profitable opportunities aren't actually available to the incumbents if they operate outside their incumbent deposit base through online mechanisms and precisely trying to cannibalise the other lots of deposit base by targeting them using just the middle and high income net worth per people because they're the only people frankly worth bothering with. You may know that Lloyds-TSB has just set up a major electronic banking joint venture with Centrica. Centrica are far and away the most astute of the people who are in the electronic household services market. They're making it a real theme, a multi-product channels into the households is their theme. And Lloyds-TSB have just teamed up with them, and the idea I think is precisely that Lloyds-TSB will defend their deposit base and depend upon the stickiness and loyalty of their customers to Lloyds and then launch an aggressive marketing campaign with other products targeted to take away the other clearers' up till now loyal customer base; and they could do very nicely because they have the perception that amongst other clearers none of them are very good at customer service; they're at the better end of the spectrum so they have a better chance of dislodging other peoples' customers than their own; so they can grow value in the new business area.
16. **GS** – In a sense, this is an acquisition of expertise from people who know how to do it in terms of marketing. That brings again the question about competitors like the Microsoft bank or Tesco, or whoever is getting into the electronic banking area. There is the question there, whether the way that things are evolving is actually breaking the whole value chain in the banking industry, in the sense that this may definitely have an impact to the way that banks – any bank- work. Is this something feasible? Is there a paradigm shift?
17. **KP** – Again I don't really know the answer. I think that last year, when we were in the midst of our euphoria about e-everything there was a definite strong view that what indeed a change in the structure of the supply chain, in particularly in the financial services, that the e-thing was changing the way that people procured financial services and that there was a fundamental change taking place and everybody had to get into it including the clearers, or else they would be gone. Today, people are less sure about this because all that euphoria has completely evaporated in a hurry; I personally think it's a proposition which quite a few players in the market still believe in: not that it will happen as quickly or as radically nor that it's a numbers game. We're not talking about how many customers you can shift away. The Egg proposition was entirely based upon numbers of retail customers and I think a lot of people think of that as a wrong proposition because large number of customers are just a pain in the butt, because most them have tiny deposits and you can never make money out of them, but rather that you have disintermediation in the supply chain in the sense that you're segmenting the market and people are going after the high net worth individuals and that the electronic channels are particularly effective for that sort of person because they tend to be more electronically sophisticated than granny Smith is.
18. That will be more so as the high net worth people are also the generation that grew up with IT. At the moment from the younger people who are sophisticated with IT,

not all of them are yet high net worth, but in a few years time, more of them will. And the strategy of pursuing that cohort of individuals through their age profile or age process is likely to be a very effective way of making money. Certainly people like Rothschild's, we have private banking operations which are focused on high net worth. This isn't really high net worth, but some of the private banking operations in the City; they regard somebody who has 200K as high net worth. There's quite a lot of those; We don't regard these as high net worth but if you look at a market place for people with savings in excess of 0.25 million, (it's a fairly decent number – we're talking tens of millions of course) and that's the target market where the electronic banking is definitely seen as being a tool which will help to keep those customers. It's almost a defensive thing in a way because the feeling is that if you don't have the convenience of electronic banking for those individuals and other people are offering it, you will lose them. So it's partly wanting to be progressive and moving where the technology is permitting one to go but it's also a defensive in the sense that most of our electronic investment in Rothschild's is of the defensive character: we do it because our clients expect us to have it.

19. And that's all relevant really to where you started this conversation because I don't think – we certainly don't – many look at the technology investments in e-banking in the sort of rate of return type of criteria, I mean there's always a test at the end of the day: we've put this amount of capital in and if we get that sort of return, is the DCF plausibly positive, given that we actually don't know any of the variables we're putting into the sums, even within a wide range of uncertainties; but that's really just a health check because fundamentally you decide what is the technology platform you have to be able to provide to satisfy customer requirements; and then say: can we afford it in the sense that if we spend 10m on putting in that electronic interface with customers, we think we're going to keep that many customers, or we think that if few don't do it we're going to lose that many customers; that tells you about the revenue or the revenue-forgone if you don't do it. It's 2 sides of the same equation, and then just look at a very crude DCF calculation – it is very crude because we don't actually know any of the parameters, or variables well enough to have a very strong feel; it's a very risky area, and as I said, the most crucial decision is usually in what the revenue-forgone will be if you don't invest. I don't think very many (certainly we) look at technology investments as a revenue growth opportunity. We look at it as a reduced potential loss of revenue.

20. **GS – You're taking the negative options rather than the positive options in the sense that ...**

21. **KP –** I think your description of your approach, which is to look at incumbents, related new entrants and unrelated new entrants, [implies that] the calculus is going to be very different for each of them. The new entrants are going to be looking at revenue generation opportunities, whereas mostly the incumbents in most of the areas at the extent that we are players at all, look at it from the perspective of the avoidance of customer erosion. If the new entrants are offering services which valued clients and customers want, and we're not [offering], they may leave us; so one way to respond, in addition to addressing the face to face QOS, which is actually still important, is to make sure you have an electronic offering as well – not instead. I don't think anybody in the traditional incumbent role believes that e-banking is going to replace face to face; it's simply going to replace certain parts of the interface between the provider and the customer. Recently, our private banking people have instituted a totally secure internet banking operation, which is nothing more than a series of accounts in which people can move money around. We've long had a service here which is basically a currency service where you could hold funds through a Channel Islands company in accounts where you have multiple accounts and you can choose whether you want to hold it in USD or DM or GBP. It just provides a mechanism for taking a view on currencies and that's an obvious sort of product to make electronic, because the people who play in that

particular area are all financially sophisticated and they don't want to have to bother with phoning up and speaking to somebody when they can just do it at a terminal.

22. But there are other sorts of transactions like corporate banking where frankly it isn't possible to do it entirely on the internet; and it won't be for a very long time, because people need to talk through what their options are; be persuaded and understand what the options are. In deposits it's very straightforward to decide whether you want to move money from one currency to another but if you certainly got the proposition as a small company that you need to raise 5m to finance some sort of investment, then the bank needs to take a lot of time in understanding whether this is a good use of the money or not, and you as the customer need to spend a lot of time understanding what their options are; are you going to go to the medium term market or are you going to a banking facility or whatever. Even Treasuries of companies don't understand all those things on a day-to-day basis and you have to go through face-to-face meetings. I think that some of the products we're involved with are ideal for electronic banking and the customers expect it. I never say never because the more you can create plain vanilla products, the more amenable they are to electronic commerce. But the more there's important details to be sorted out case by case, the more you're going to need face to face
23. **GS – I wanted to come back to the issue of using the electronic channel in terms of changing the product. Whether this can be achieved: for example, banking products are something that – correct me if I'm wrong – are seen as off the shelf items which are actually generated at the point of sale but is it 'take it or leave it' in a sense?**
24. **KP – It isn't really.**
25. **GS – Maybe in a private banking sense ...**
26. **KP –** Retail deposit accounts, placing money in an account at a rate of interest, that is the closest to plain vanilla you can get, and that is the favourite that people have started with in the electronic banking area, but even insurance like telephone & internet activity in insurance but we all know now that it's really difficult to compare offers between one insurance company and another because the limits and the scope of the coverage can all differ the amount you have to pay against any claim, whether it's the first 50 GBP or 100 GBP or whatever; actually you have to be quite sophisticated to be able to compare in order to be able to shop electronically. People do, and I think frankly that people tend to misunderstand the nature of some of the offerings. There are some quite interesting software products now on the web, where you can put in all these things and they'll do your little comparison; they're not just arithmetic but will also highlight that [for instance] in this one your cover is limited to 30K and in this one to 40K. But there's actually really few products that are plain vanilla of that sort; having said that, I've always thought that equity broking is exactly the same plain vanilla: if you want to buy 10 shares of BT, then you want to buy 10 shares of BT. There's nothing to it. I guess I would think that the electronic channels will be most effective when you can structure an offering when it is (a) plain vanilla and (b) where people can easily therefore compare between offers; but from a retailer's point of view, that's absolutely the worst thing because what you want is not to have transparency; you actually want to capture margin by appearing to offer a cheap product by having a headline price, and then having all sorts of conditions attaching to it, which make it an expensive offer.
27. **GS – There's another side to this. How about flexible products as opposed to what I called an off the shelf item. For example, if we go back to retail banking, customisable accounts – in the sense that someone may not be**



interested in having a ridiculous 3% interest (which is not ridiculous anymore anyway) but some other facility. What I'm trying to see – and I hope you see how all these issues link to the decision-making and into the appraisal of technology – is how can this use of electronic channels affect positively or negatively the creation / increase of the flexibility of banking products? If you take it in the sense that an electronic channel is a facility and there is a lot of competition – there are a lot of new entrants who are more sophisticated in terms of how they do the banking business; some of them are less sophisticated. To what extent may this competition get into the increase of flexibility in products? Not just deposit accounts but any type. An example would be instant loans as an indication of moving towards this end. Do you see something moving towards this side of the general area of banking?

28. **KP** – Honestly I can't answer because it's not something I'm close to. You need to talk to people who are at the cutting edge of this game. My sense is that it is moving much more slowly than most people have expected. Thinking of those sorts of things the area I would have expected to see most movement the quickest, is probably the SME corporate banking market where there are lots of small companies with turnovers between half a million and 10 million; all they need frankly is revolving working capital facility. You've seen just this week that the competition commission has come out with severe criticism of the clearers for not providing good service to those people. There doesn't seem to be any indication that even though that sector [SMEs] is apparently paying high margins and getting poor service from the incumbents, that this sort of electronic alternative just simply hasn't happened at any scale. That's a surprise because if your company has half a million to 10 million turnover, you should have the sophistication to understand the opportunities out there. I'd be surprised if nobody is offering it. So maybe there's market resistance to it. Maybe people are just too nervous about dealing large sums of money on the Internet as well. But that's the best test to my mind. If you can find markets that aren't being well served – and the SMEs corporate banking sector seems to be one of them – and where they paying high margins; and they mostly pay outrageous margins over LIBOR and still you're not getting a response through these new product areas, suggests there is some resistance of the system. Exactly what it is [is something] I don't know enough about.
29. **GS** – One of the reasons why I think this area is interesting is because I'm trying to investigate investment appraisal in organisations where investment itself is essential part of their activities; it's actually the specialisation of financial institutions. So great interest lies into whether – and my indication from what you are saying is that they usually don't do – banks or financial institutions treat investment, their own investment in technology, as opposed to their own investment into something else; and whether this is in a sense explicit, or whether there are any form of rather tacit ways of dealing with technology; is this a conscious thing? The specialists who deal with company investment, do they understand the specificities of IT? What can we make out of that for the internal process of the decision-making, the persuasive side of the appraisal?
30. **KP** – All I can tell you from personal experience – which is the experience from what I do here (the most useful thing I can probably do is to refer you to people for whom these sorts of questions have been sort of central to their lives as part of your case study) but here at Rothschild the person who is head of our IT group and he is both initiator of propositions on IT spending but he's also very much the subject of operating divisions who take the decisions on the basis of advice from him – it might be worth talking to Richard Cawdell; before he was with Rothschild, he was head of IT at a money broker where they've spent a great deal of money very early on for putting in state of the art systems for wholesale money banking on 'ether'. You should certainly try to talk to people at Centrica. Mark Clare is the



finance director; he's actually now the deputy chief executive. I don't know whether he would like to spend time with you himself but he will probably be happy for you to talk to some of their people. None of them will give you any numbers of course. It's the biggest problem – that sort of information is gold dust! But all of their thrust I think they'll tell you it's not about methodologies for evaluating investment, but rather market intelligence on stickiness, retention rates and sustainable margins. They've done fantastically well; they're very successful. You should also try to talk to Egg and IF as well, because Egg and IF have both bet a lot of money in various propositions but again the problem with them is that they'll give you the 'party line' which is that it's all working terrifically well.

31. **GS – Yes of course. This kind of response is always taken under consideration.**
32. **KP –** The problem with doing case studies based on questionnaires or interviews is that distinguishing what is truthful or self-serving is quite tricky.
33. **GS – You have to somehow develop a filter.**
34. **KP –** But the only experience I personally had here when I ran corporate finance a few years ago, we had to take a decision basically to completely retool our entire IT framework in the corporate finance area – investment banking as we now call it – and there was nothing to do with retail; we had evolved in the late 80's & early 90's an internally networked system of Apple Macs; the S/W had moved to where Microsoft had become a standard and all our clients wanted us to talk to them electronically, using the standard which was the emerging NT platform and certainly Windows products. We didn't do a CBA; we simply took the view that, in order to meet our customer requirements, we had to (a) migrate very very quickly and completely from Apple Macs to PC platform and at the same time install a much higher standard of S/W products on this platform, because we knew what we needed to work with, we knew what our clients expect us to do; and then we simply procured the cheapest kit we could; I don't think we had any time. It was purely a strategic decision because our clients demanded it, and we were doing all sorts of internal financial modelling work and they were saying 'send us the model on the Internet'. Those days, it was sent on a floppy disk or a CDROM. Then they couldn't run it because they didn't have their own Macs; it was a purely strategic decision; customer satisfaction demanded that, like everybody else in the world, we move to MS products and that we actually just tender for the kit. We ended up with HP but Compaq and all the other cast of characters bid for the contract; it didn't make any difference because as you know they all run the same S/W. Then we tendered a contract for the networking installation of the S/W overlay on H/W. Computer Centre actually won the contract. They don't do anything except install the network kit. I don't think it's a particular help to you, but we never actually did any CBA.
35. **GS – In fact you're very very helpful. One of the things you mentioned before, which I think is very interesting, is that if you talk to people they will tell you they are definitely not applying any kind of methodology. This is one of my central questions; the disparity in fact between theory and practice: You see all these beautifully designed strategic or hybrid or financial methods but the final decision of course comes down to the strategy of the firm, internal politics and the whole decision-making process. Would you say that there is no methodology recognisable, or that there's no methodology applied in general?**
36. **KP –** No methodology might be recommendable but as you know, the traditional investment appraisal methodology, day to day in practice, had always been DCF and you do a forecast of your revenues or your revenues forgone if you don't make an investment, and you stick in your costs and try to calculate some sort of Rate of

Return and compare that with what you think your hurdle rate is. That's been the tradition ever since the 70's when the first business school presentations were made; that what people have been doing. I think what makes that inappropriate in technology – well, not so much inappropriate as bloody difficult to apply – is that the uncertainty associated with the projections is so huge; nobody knows even 2-3 years ahead; indeed, you expect that if you invest heavily in a new technology platform, it *will* be redundant on 2-3 years time; so, making 15 year projections just doesn't help. And certainly it is really a strategic decision: Do I need to offer my customers this level of IT service, and can I afford it? Really the second question is probably as important as any formal investment appraisal period. What we've gone through in the last 5 years has been an extraordinary boom in financial services. If you look at the stock price of banks or if you look at the profit performance of the investment banks, it's been unprecedented and extraordinary. Frankly, people are much happier to spend the extra 10 million on IT services when profits are huge that they are what they're going to be this year for example. Really it is almost as crude as that. Would we like to do this because we think our clients want it?

37. If so, what it's going to cost. Then how are we placed as a firm? If the proposition is that we're going to spend 10 million, well that's OK because we made 200 million this year so let's not worry about it. It's pretty much a rule of thumb. I think the very very sharp downturn that you see in technology stocks of substantive companies – not the dot-coms but the Cisco's & the Sun's & the Microsoft's – is justified in the sense that there's an awful lot of companies out there who have been spending on IT like it was going on fashion, will now stop; they'll change their rule of thumb from 'It's going to cost 10 million; let's do it' to the rule of thumb 'It's going to cost 10 million; let's defer it'. It's not 'let's not do it' but 'let's not do it now', because things aren't looking too good. I mean really it's pretty much that crude. For us too, except that we're not actually facing any big IT spending at the moment. We made our IT spending and we're not in the cutting edge of this area; in the front end of the Eggs and the IF's and the Centrica's. They're interesting people to talk to. Innogy too. You probably never heard of them but they are the UK part of the de-merged National Power. National Power was an electric power generation and distribution company but they have ambitions to do a Centrica too, because they have lots & lots of customers to get into people's homes and sell them financial services products and other things. They're a new entrant really into the financial services area; they'd be an interesting company to speak to... I must go..
38. **GS – Thank you very much for your time...I don't know whether you would feel comfortable to hold a meeting again some time.**
39. **KP –** Sure, I'd be happy to do that, and if I could be helpful with introducing you to, or you using my name to talk to people about your case studies.
40. **GS – That would be fantastic; one of my problems in this area is access. ....**
41. **KP –** The area is fantastically sensitive and my experience is that they're happier to respond to questionnaires than they are to meet face to face, because in a meeting they're afraid they may say something that they regret. In questionnaires, they can think twice.

**12. WM Company (STATESTREET).**

1. **GS – So, please keep saying what you were saying...**
2. MM – Yes, I suppose that if you been able to go back, before I joined the WM Company, I worked for Natwest Markets, which was part of Natwest Bank, before that I was with H. Samuel; a bit more recently, since I joined with the WM Company – they were a subsidiary of Bankers' Trust which was then taken over by Deutsche Bank, which was then taken over by StateStreet. So I'm with StateStreet for one year so far. So, part of what I am saying – it depends on what questions you ask me of course – but, you know, is a sort of distillation I suppose of the experience of different organisations and their procedures.
3. **GS – This is, I would say, precisely what I am looking for; I mean, just to begin this conversation, probably you don't know much about me, so I'd like to say a few words about where I come from and then go back to your own background. So, I am originally an electronic engineer; I worked for a couple of years as an electronic engineer in Greece. This is where I come from and this is where I graduated. At some point, I took an MBA here in Edinburgh and after a while I decided that I should do this research, my PhD research. Now, my PhD is about investment appraisal of IT and, for the sake of focusing, I am focusing on retail Internet banking projects. However, this is not necessarily what we are going to talk about, as I explained before. What I am looking at specifically, is the process of decision making for technology investments, and in particular IT. And I am finding it all the more fascinating how the usual assumptions that we talk about do not apply, at least in some instances. Well, this is more or less where I come from, so would you like to tell me a few things about your own background?**
4. MM – Sure. Originally I was a mathematician and then did Operational Research at postgraduate level, and then I also started to work in Operational Research, did a couple of years, before transferring to sort of more mainstream systems type of work, for a couple of years, with a brewery, Scottish & Newcastle; then I joined a broker firm, Wood Mackenzie, more to do mathematical modelling. So, back out from mainstream again and towards more mathematical stuff, models on markets and particularly gilts and financial futures; but then I moved again towards the mainstream of computing in terms of implementing systems for the broking business, across a wide range of things – research systems, marketing information, trading systems etc. And, so, that is kind of the background... that sort of areas that I've been working in through my career. Now, in the last few years here, I was asked to take on the infrastructure side of things, moving... I've done a combination of development activities and infrastructure type of projects through my career, but I've been more focused on the infrastructure side during the last two or three years.
5. **GS – I see. The core of what I would like to discuss today, is with regard to your role as first of all advisor to financial institutions and to private investors as well. And, because of your external position outwith the industry, I'd like to discuss a few of the assumptions and perceptions around the process of investment appraisal; and I am not talking specifically *only* about the financial side of things; I am rather talking about the whole process of decision making and what the role of the Finance function is within that. So, I mean, from your experience with IT projects that you are aware of or you were involved in, what have you seen the role of the Finance function to be? [5.20]**
6. MM – We've been in it and out of it, and on a number of occasions, I think, the positive side that I've seen in terms of the role of Finance, is that, you know, if in some product development area is making a proposal to invest in technology – and



sometimes that seen from an infrastructure side might be because we have to do a technology refresh or whatever – I would, and a number of people would always use Finance to present the numbers; because that means that you've had an independent head look at it and, you know, whatever the company's current investment appraisal system is, you can be sure that the numbers will be presented in line with that; because obviously, the range of companies that I've just talked about, they all do things subtly differently. But, basically we have *some* form of investment appraisal in terms of capital investment; so, that's the positive way at which Finance get used. I've seen it not recently, but I've seen it in the past, where they've been pretty much excluded right up to the point where the projects were presented for, you know, final assignment. Now, ... just because sometimes product development people think that they don't need inputs from anybody... you know... because... And I think this was maybe more a bit prevalent in the lead up to 2000 when a lot of dot com stuff was going... I think... signed practices in terms of investment appraisal certainly went out of the window, in those organisations. But to some extent, where people were doing similar things within established organisations, I think, you know, the same standards that used to apply, and now apply again, were kind of forgotten I think!

7. **GS – So, actually, have you seen a difference about what happened back then in the dot com boom and what happened after the dot com bust in that sense?**
8. MM – Yes, sure.
9. **GS – So, for example you've spoken about product development where these people didn't really want any outside input in their project; my question there is, in terms of the numbers, the figures, should they not want any external input from Finance or whatever, how would they come up with their figures? Or was it that it was more a strategic justification rather than a combination of both?**
10. MM – No, I mean, they would talk directly to external suppliers potentially and get quotes from them and perhaps involve technologists like myself and getting quotes on hardware or development effort or whatever. And they would be able – because they were talking directly with the business as well – to build the whole business case. And in some ways, that is right. That's what product development is about; Finance is a kind of a support bolt to that, I mean, this is how I would see it and I just think their involvement more upfront for me, just makes it easier... you know... just makes sure that you use the right procedures and so on. But anyway, I think that those sorts of practices are better established.
11. **GS – I would like to get into an area that is... well... more accurately represented by the expert groups; so, you have finance experts, IT experts, you have technology experts, you know, different bodies of professions if you like and so on. And there is some kind of establishment of a power relation between them. So, going back to what you were referring to, for example instances where Finance was left out of the loop until the end, what was the dynamics between these groups in that sense? Was it that, for example, Finance didn't care, or - from, again, your interpretation experience – was it some kind of a turf war?**
12. MM – Yes... well I suppose it's that people have different views of ... you know... their own importance {laugh}... and then in organisational structures people in product development can be fairly sure that they're doing the right thing and so on and that... you know... it's their job in some way that is central to it and therefore to set a very strong direction and let other people catch up and sort out the stuff behind them; so, I'm not completely objecting to that as it sometimes it needs to happen that

way... but ultimately, you do need the other disciplines, like the Finance discipline, to be brought in at some point in terms of...

13. **GS – It is something that I keep getting from almost 80% of the people I speak to... it's what I mentioned as we started about the assumptions that we're working with, which however do not hold true in most of the cases; I think that there is some more important power relationship between the different expert groups in a sense.**
14. MM – Yes, probably.
15. **GS – I would like now to get more and more into the investment appraisal side of things. There is in some sense, when a firm is considering the implementation of particular technology or set of technologies for that matter, there is a process of identification and measurement of the expected if you like – in inverted commas – returns and costs. First of all, what I would like to ask is, from your experience, is there a difference between the identification as a function and the measurement as a separate function? Or is it that these two are enmeshed into one?**
16. MM – Well, I think every investment appraisal system that I've seen in any of the organisations I've just talked about needed to do the post implementation review and to monitor the benefits; they all talked about the need to do it, but I don't know if I've ever seen it done terribly satisfactorily anywhere. I mean for example, the takeover of the Deutsche Bank business by StateStreet, they've actually made a big effort to make sure – and this is a business project as opposed to just an IT project – to... because they promised to deliver certain targets to the analysts, they've made a big effort to keep the costs separate, so that they can demonstrate they can make the savings that they were going to make and all the rest of it. So, I think when things are big and public like that, then in the organisation they make a very conscious effort to prove that they deliver the value that they set out to deliver to the analysts; and if they come back in a year's time, having taken over an organisation and say "well, remember we promised you...well... it's too difficult to measure you know, so we're not going to bother"; you know that this is not going to go down very well so it does happen.
17. A number of technology implementations that I've seen, they're supposed to have lots of benefits. The thing is that they target them so much, in terms of the business model and so on... I mean it's not that they're not looking at the ongoing profitability of the business with the new technology in place, but that's what they tend to focus on rather than specifically whether that project was a success. I mean, they might do that at some break point afterwards, like, say "hang on a minute; you've promised this and that"... these sorts of things do happen, but I don't think it is tied down quite so much because of just how much effort is involved in trying to maintain a sort of level playing field into afterwards... you know... get toward your forecasts beforehand, so that you can actually make a sort of apples and apples judgement. That is actually quite hard, and it's got to be really important before you make the effort to do that.
18. **GS – I see. Speaking of delivering figures, as you said, to analysts and all that, one of the biggest issues around technology implementation is what we usually call intangible benefits. I don't know if there is such a thing as an intangible cost; I guess there is...**
19. MM – A lot of the technology implementation that I've seen have been defensive; you know, it's like "if we don't do this then the consequences are that we will...you know... lose our position in the marketplace" and so on. So people always turn these into numbers but actually, you know, there are fairly intangible things that we're arguing or put in the discussion sometimes in terms of, you know, competitive

position, in terms of product richness and so on. And a lot of things are justified on the basis of defence.

20. **GS – So, it is more, I mean, what I was leading this to is the question, is there a useful quantification of intangibles, again from your experience and what you have seen, is it that people usually and firms usually move on to integrating intangibles in their models, their investment appraisal models and techniques, or is it that they see them as a set of additional soft assumptions that you put in your model?**
21. MM – Well, I would say that they normally appear within the financial appraisal... I mean somebody *does* quantify them. However, when people are looking at, you know, an opportunity and they see that actually 300% growth in revenue year by year is factored into the number, then they go "hmm, well, I wonder how it looks like if you just assumed this to be X..."; so, people do a lot of *what if* sorts of analysis based on whatever the financial case is that is put forward, and ultimately those sorts of factors are important in terms of, you know, the ultimate decision maker has to, you know, understand where the risks of the numbers are; you know, they are in front of them. Either, for example development costs that might overshoot by 200% - traditionally - or revenue projections that may be over-optimistic and so, you know, you've got to get some sort of realism to these numbers.
22. **GS – Yes, I understand. In terms of using the figures that you get out of the black box, if call these techniques or processes a black box, I mean at the end of the day it boils down to the 'reporting vs. appraisal' kind of issue: at the end of the day you're going to have an output from your box that says for example 'NPV > 0'. This positive NPV is something that traditionally, I mean as far as my experience goes, and I want to do some reality check here, is something that most of the times is used as a benchmark: there is a centrally prescribed benchmark; for example they may say "we're not going to do that because there is much project competition and we don't go for projects that have negative NPV but the ones with positive NPV". Having said that, this positive NPV *does* incorporate all the assumptions that you've just talked about. So what is the position there, from your experience? If you appreciate that, what I am trying to do is feel reality in the sense of 'process vs. practice' question.**
23. MM – Yes, yes, I do understand and processes is there around all these sorts of projects one way or another and I've never seen... well... I guess this is probably not true... if we go back five years I've seen some people saying "well, we've just got to do this; we've got this idea in terms of that we're going to make so much money that you don't have to worry about the costs" and so on. That sort of thing happened in broking business. And in broking business you use to have all the time very quick decision making and it's their money that is at risk, so if they've decided to go for it, they've decided to go for it! But there is nobody else to answer to. Obviously in limited companies and so on with proper corporate governance and all the rest of it, you've got to do all this; but at the end of the day there are some decision makers; the thing doesn't go to endless committees; there are people who have to have the power to decide to invest large chunks of money in business ventures. And they will always have this sort of formal backup in terms of what they're doing, but how important are the intangibles about "well, it's strategically important for us to grow in Europe" and so on, but how does that appear in numbers? {laugh}
24. There are all sorts of, you know, "that person is a key client and the less we develop that functionality then he's going to walk". Obviously, you can put the revenue that is at risk into the business model and so on, but how do you weight that in terms of "well, that particular client is a trend setter and if we lost them, then how might that impact more widely?" and so on. So, there are lots of intangibles like that which are actually I think in the decision makers heads as well as the numbers. And I think they are pretty important. Obviously, if there's a huge financial case for doing



something and it's pretty much risk-free, then... {laugh} people will go for it! But usually, they're not risk-free; there are risks around what they're trying to do, and people do their best to quantify them and to take reasonable judgement...

25. **GS – Well, yes, where I am leading this is, as I said before, that you have your model which has an input and gives an output according to a centrally prescribed hurdle rate or figures or whatever it might be and so on. This establishes some kind of threshold. Doesn't that gives some kind of what I call 'attitudinal guidance' to people that they *should* present their figures in such and such a way - or that they should tweak them, if you like, in such a way – that the NPV (and I am just using the NPV for the sake of an example) is positive? ...despite the fact that this would mean the incorporation of some assumptions that might be slightly less than realistic.**
26. MM – Well, I'm sure I've seen that sort of thing happen in the past... however, you know, the senior management are pretty astute at putting their finger on this sort of issues and, you know, people wouldn't put forward propositions like that, you know, that will find themselves very close to being questioned and wont necessarily do them any good.
27. **GS – Yes, I see. Well, again, regarding the reporting structures, I mean, when you are delivering some results and you're doing for example an infrastructure project that has, of course, its costs and benefits, at the end of the day, what goes into the annual report is a set of figures and measures and so on. To what extent do these particular measures guide what you are appraising? So, to what extent is reporting driving the appraisal process, if you know what I mean?**
28. MM – Yeah, yeah... in terms of... {pause} ... one of the things which is mostly measured is the amount of money that is invested in technology as a whole...
29. **GS – Yes, there's a technology budget...**
30. MM – Yeah. And, you know, there is probably something in the annual reports that says how much has been invested in technology in the organisation and there may be some targets around that; because if it is too high, you're probably wasting resource, and if it's too low then are you really investing in the future of the organisation? Because if you're not spending on technology then the assumption is, you know, you're not building for the future. So, at that level, there is some sort of watch over, but if you're then dealing with specific technology initiatives, then you probably wont see anything in an annual report on that. There may be an exception to that, but I don't think you do. So, that sort of thing may well be appraised in terms that is unlikely to be communicated; you know, you don't necessarily want to wash your dirty linen in public {laugh}. You know, you don't want to disclose things that it's not appropriate to do so.
31. **GS – Yes, it's not actually disclosure I am talking about; it's more whether the measures that you are using one way or another for your reports prescribe the measures that you are using at the lower level to appraise your technology investments.**
32. MM – I suppose another thing that is often quoted these days is headcount. You know, and that is something that the management survey closely; so, whatever it is that we said that we're going to achieve, has to be achieved within a certain resource level. The expenditure level that has to be part of that is headcount. So, that's another thing that we're obviously always watching in organisations; so, that's another key thing that tends to be looked at. But I'm not sure I'm really answering the question that you're trying to get to...



33. **GS – Well, you are in a way... you're providing your own perspective. Now, going into the actual processes and the actual methods of technology investment appraisal, have you seen the more sophisticated, or more what one calls IT-specific techniques being used for IT projects? I mean, first of all are IT projects treated any different from other infrastructure projects or other capital budgeting projects?**
34. **MM – {pause} ... I mean, ultimately, probably not. But in the process of getting to the table then yes, in terms of the way in which people look at the numbers to put in the proposals; I mean things like techniques that are used around, you know, estimation of the running project costs are very particular to IT. For example, how much effort is going to be involved in building a new system that is part of this investment that we're looking to make; there are some very specific techniques around trying to budget for something around that, which would be used, ranging from 'finger in the air' stuff to some detailed function point analysis or something; you know, some techniques that people believe will deliver more accurate sort of results.**
35. **GS – Can you name some of these techniques?**
36. **MM – Well, Function Point Analysis is one of the techniques used in development to try and give an idea of what the complexity of a system is going to be and therefore to derive this sort of costs that are associated with building it. And then there's other stuff – I really don't know the names of these techniques {laugh} – around how much effort will be involved upfront in terms of defining the requirements through to the specifications, through to the build, through to the testing, through to the implementation, to sort of break the whole thing in a lot of detail. So, that is kind of specific to IT builds. Now, if you're outsourcing the IT build part of it, then that's somebody else's problem {laugh}.**
37. **GS – It's just a figure in your calculations.**
38. **MM – Yes precisely.**
39. **GS – I see. Well, referring also to things like, from the Finance point of view, there are methods like – I don't know if you've heard of it – Real Options for instance.**
40. **MM – Yes sure.**
41. **GS – Just to check. I am asking everyone I talk to...**
42. **MM – ...and they all shake their heads do they? {laugh}...**
43. **GS – Yes, which is very interesting. It's a financial technique that is based on options valuation, Black-Scholes formulas of options valuation. They're called Real Options and it's about treating strategic options as financial options and so on to attach values to different options; it is supposed to be one of the... well, some people see it as the next big thing but anyway.**
44. **MM – It strikes me that all these intangibles we've talked about and strategic things, you know, are so important in these big investments that being a bit more accurate about the mathematical technique that you are using is a waste of everybody's time and effort! {laugh}**
45. **GS – {laugh} A very sober opinion I guess in that respect! Right. PIRs we've talked about... Another thing, again related to what we've talked about is short-termism. It is again technology, and especially Information Technology**

something that is more about the long term and less about what it is going to give us at the close of the year accounts. On the other hand, you have the use of all these traditional financial methods and measures like the NPVs and the IRRs and all that, which are mainly built for making some predictions about the short term. So, there is some kind of disparity between what the real value of IT is and the methods you use to appraise them: one is more long term than short term; the other is built for the short term. What is the balance there?

46. MM – Well, I think probably people start off with the idea that there is a big investment that we have here, so you have to look at the long term, but try and get short term deliverables out of it. You know, so that is not just about short term deliverables in terms of the financial returns; it is actually to check that you're making a progress to commit yourself to two or three years of heavy investment and to see no returns until the end of the three years, when it's IT that you're talking about is a risk of burning three years' worth of money. So, people will probably say "right, what is the first deliverable in six months, one year, eighteen months" and track that sort of thing just to make sure that these things are being delivered. I think, the other thing is that although the money might be there for three years worth of investment when you start-off the project, then all financial organisations, when it comes to it, have to turn in the profits every year. So, if you get to the point, you know, during any financial year, where they're concerned that there has been a downturn in world markets and the revenues have gone down, you can't have your costs going up in the opposite direction because you'll get your projected profits turn into a loss; so, you've got to have a way of turning down that investment into that project book. Some things might be protected from that, absolutely. But, you've got to balance the book somehow.
47. GS – Right. Is it actually the follow up of the costs and this staged review, if you like, that is happening? Or is it that at some point, especially in infrastructure projects, what you would usually see is that the assumptions and the business concept sometimes in the way of delivering totally changes. Is it the case or am I just talking nonsense?
48. MM – Well, I'm not sure I completely understand this but I can talk about some infrastructure projects, like, for example, the rollout of XP to every desktop in the UK, which is an infrastructure project that we've been running for the last year or so, and there's a cost associated with that upfront; there's a timeframe that is different for different businesses in terms of the pressure and therefore we can stretch it or whatever by another six months if we need to without increasing the headcount, in terms of delivering it. But the capital expenditure is going to be the same even if you delay some of that spend for later if it suits us; and we're not talking about bringing in extra heads; you can sometimes stretch the time for infrastructure projects like that, because you probably know that you've got to do it but if it's an extra six month or whatever then it probably going to help your business, but if you don't do it in the next two years, then you're going to be really struggling. Networks are similar. Moving to next generation network technology will reduce risk and increase bandwidth and save us money, you know.
49. GS – Right. I understand these are rather basic calculations and assumptions. I would like now to go back to the costs and benefits issue: from your experience and what you have seen in working with financial institutions and so on, regarding IT projects, what were the differences that you've seen between the expected costs and benefits and the real or effective costs and benefits that came to be at the end? Was there a big disparity, and if so, where were the weak points?
50. MM – Right... I mean I think on the costs side, the weak points are usually around development costs. In terms of costs of big developments that are either done

internally or externally can escalate very easily. So, that side of the equation is probably where we get hurt the most in IT projects. On the infrastructure side, things are usually a bit more certain in terms of what you are trying to achieve, and generally people deliver at the cost they've said they would deliver and when they said they would deliver. As I explained before, that is not always a big problem. It is sometimes, if it's tied into particular market deliverables for clients but then it is usually prioritised that it is delivered. On the benefit side now, and in terms of where things don't always happen, generally speaking, if, say, the benefits size included loss of business heads or - well, the deployment of business heads is not always loss, but I mean, "implement this wonderful new system and we'll have these wonderful efficiencies and we'll need 20% less people in this function". It is very difficult to actually make this happen and to measure that that *has* happened and you need a very determined organisation to say "well, I know things have changed but still I need that 20% of heads out of that area". Because usually when systems or IT projects are implemented there is some changes made along the way, what people were doing may not fully be understood upfront and therefore that you're left with some systems that absorb headcount. So, you've got that on the benefits side that does not materialise and everything stays mire. And sometimes people are over-ambitious as you've said out there about what new revenue opportunities the system will give us, and they don't know how to materialise these, so they get squeezed and the costs go up and the benefits go down the opposite way.

51. **GS – Yes. Was there ever a case where you had things the other way round, where you had unanticipated benefits?**
52. MM – That's a good question {laugh}. [pause]...
53. **GS – Even when you didn't get the anticipated benefits but different benefits instead...**
54. MM – Uhm...yes, there are instances that these things happen. You get lucky sometimes, so sometimes you invest in infrastructure and if you look at the business outlook that you had at a time might have said 'don't invest' and you've been trying to keep the costs at an absolute minimum. But then you go into a merger or takeover situation, say, and you finally have capital investment up to a certain level makes that all process makes all that process so much easier. So, that is an example of completely unplanned benefits.
55. **GS – It's more of a matter of chance rather than specific to the technology... what I was mostly referring to is unanticipated benefits that you may get from a technology, i.e. something that nobody thought of and which at the end of the day cropped up... like for example when you are applying an IT platform in an organisation, you get specific departments using the platform in a profitable manner, but to do something that was not initially planned. Did you have any such experiences?**
56. MM – [pause]... I mean, there are some things like that but they tend to be more at the edges of it. For example I have on my desktop a messaging tool which comes from Lotus, which we now have as part of a corporate license agreement; so, that is getting deployed in ways to solve other problems that definitely we haven't thought about. [pause] ... And I guess people use all sorts of enabling tools like shareware and so on like Lotus Notes or other shared point technologies and things like that in ways which you don't predict upfront. As an organisation you decide that you need to invest in stuff like that, that other people *have* got benefits from. We're not going to be very specific about what those benefits are going to be, but we are going to give them those capabilities to work with. So, there is that kind of thing.



57. **GS – Right. I would like now to step into the area of your involvement as an external into banking and financial institutions. In the process of appraising technology investments, whereby, as you said, as a company you're being called in to advise in some respects about infrastructure projects or IT projects and things like that. Is that any of the role that you've assumed? I know that as a company you do risk analysis and all that and you do consultancy; so, it the role that you sometimes get is to give external input about particular technology investments?**
58. **MM – Certainly, in StateStreet organisation one of the important lines of business is to take on back-office work from other financial institutions. One very large component of any bid that has been made to one of these organisations is 'what is the technology strategy in terms of the take-out and what are the costs associated with that'. So, we do get involved to some extent I suppose in advising clients in terms of what is the sensible route for them to be taking, but obviously around our products, if you know what I mean. In terms of internally then clearly which technology should they be using next, what is the next generation; there is a way of influencing those decisions within the organisation, but it is important in an organisation like ours, I suppose, to think globally and act locally. So, you don't want different network technologies in the UK that you got from the States or wherever; you know, you've got to try and get certain key things standardised globally and that's common to any of the organisations I've worked for 20 years or so. ... although surprisingly in any organisation you somehow manage to do something different {laugh}.**
59. **GS – Right, I see. Where I am getting to actually (and I'm aware of the time) is the role of the external advisor to the internal processes of technology investment decision making of a particular firm. What I am actually asking is that: they have their own processes and their investment decision tools and assumptions and all that; what is your participation there as an external source? Is it purely on an advisory role type of consultancy? What is your involvement into the actual implementation?**
60. **MM – If it's a third party organisation, a client, then it becomes all of those things because you've got to anticipate it and put together a financial proposal in the first place and all the legal stuff and that sort of thing, and then you can often end up project managing the IT infrastructure implementation or whatever for that organisation. And then there is the ongoing support for whatever it is that is put in place. I don't know if that answers the question.**
61. **GS – Well, it answers part of it. The actual question was about the firm's response in processes and inputs that are in some ways foreign to their own internal processes. Is there some reluctance or resistance?**
62. **MM – Well, I mean, ultimately, I suppose we are committing to doing something to them for a cost, and if that meets with their internal approval, you know... obviously it's a different system here, and they will ask questions; there will be differences of interpretation about what we mean by something, what they mean by it but these are obviously things that you have to try and work out with the client and it's important to... obviously you've got sales people who are experts at getting to the bottom of these things and getting the relationship sweet, and hopefully some of the technologists at least are business-minded and they can think on their feet in terms of being put in that situation. Not everybody can.**
63. **GS – Right. That is more or less what I wanted to discuss. One last thing I would like to ask you is, from what you've read in my documents, from the discussion that we had, do you think that there is an important aspect in the**



**whole discussion that I am missing out and that I should be looking at? I know it's a hard question but I do that to everyone {laugh}.**

64. MM – {pause}.. One of the key things that I have certainly seen over the last number of years where we've had increased competition in financial services and consolidation going on within the industry, is the amount of defensive action that is going on around IT. And that is not to say that that investment appraisal can't be about defence, but, you know, I suppose reading this {MM points to my briefing document} it sounds as if it is always about doing something very positive, you know. While it is often about just "well, hang on, we need to do this in order to maintain our revenue stream and counter what is going on elsewhere". If you look at some of the Internet Banking ventures and how many people have done it as 'me too', to be defensive as opposed to because they necessarily see a huge case for it; they just see that the revenue is going to go away if they don't do it.
65. **GS – This is something that I am taking into account and that is more because my studies started back in 2000 – it's a part time PhD and I've chosen this area to reflect on something that was mature in terms of technology, but yet again still had to be implemented. So yes, this is absolutely true about defensive strategies. So, that was useful! Thank you very much.**

# Appendix B – Additional Figures, Tables and Notes

## Chapter 5

**Table B.5.6: Distribution channels offered by major retail banks and Internet banks (source: Datamonitor)**

Provider	Branch Network	Post Office	Telephone	Internet	Mobile Banking	iTV
Abbey National	3	X	2	2	2	3
Alliance & Leicester	2	2	2	2	X	X
Barclays	2	2	3	3	2	X
Bank of Scotland	3	X	3	2	X	X
Halifax	2	X	2	3	1	X
HSBC (excl. First Direct)	2	X	2	2	X	2
Lloyds TSB	2	2	2	2	X	2
National Australia Group	2	X	2	2	X	X
Natwest	2	X	3	3	X	X
Northern Rock	2	X	2	2	X	X
RBS	2	X	2	3	X	X
The Co-operative Bank	2	2	3	2	2	X
Woolwich	2	X	2	2	2	2
Cahoot	X	2	2	2	2	X
Egg	X	X	2	2	1	1
First Direct	2	X	3	2	2	X
Intelligent Finance	X	X	2	2	1	X
Smile	X	2	X	2	X	X
Virgin One	2	X	2	2	X	X

Key to benchmarking table:

*X* = channel is not offered.

*1* = Provides only information; not transactional

*2* = provides both information and transaction functionality

*3* = both informative and transactional, but also innovative

**Table B.5.7: Types of Internet Banking entry strategies in UK Banking by mode of operation.**

TYPE	Examples	Strengths	Weaknesses
Standalone Internet Banks	Cahoot Egg First Direct First-e <sup>1</sup> IF Smile Virgin One <sup>2</sup>	demonstrate technological leadership no need to integrate old & new channels attracts Internet-savvy customers (cash-rich/time-poor) Brand damage limited in case of failure. Develop simultaneous technological & banking expertise – potential for cross-selling technology.	No use of existing bank brand Need to compete in loss-leading to gain market share. Need alternative channels to offer customer value Only suitable for products with little need of customer-bank interactivity.
Integrated Internet Bank	Alliance & Leicester Barclays Clydesdale Lloyds TSB HBOS Woolwich	Less risky than standalone (no new business/brand setup) Less need for loss-leading strategies Easier conversion of customers to new channel than standalone. Build Internet Banking infrastructure in integration with bank's systems.	Unlikely for Internet Banking to attract new customers. Difficulty of measuring market impact of Internet Banking Cost implications of offering the full product range via Internet. Need for additional infrastructure spending on Internet Banking support services (call centres etc) Risk of brand damage on failure of Internet Banking. Major technological integration with old infrastructure is needed for full functionality.
Standalone and Integrated Internet Banks (Mixed)	Abbey National Co-operative Bank Halifax HSBC RBS Group	Less risky than only-standalone mode. Dual benefit in converting old customers and attracting new ones. Potential to migrate existing customers gradually to integrated services & then to standalone. Technological competence common to two modes.	Cost implications of developing both ventures. Possible to send ambiguous messages to the market. Risk of cannibalisation of own customers. Risk of using the same business model in both ventures.

*Adapted from Reuters Report 'UK Online Banking, 2003'*

<sup>1</sup>First-e was closed down in September 2001.

<sup>2</sup> Virgin One is now branded as One Account and is a wholly owned subsidiary of Royal Bank of Scotland.

**Table B.5.8: UK financial institutions Internet Banking entry modes.**

<b>CATEGORY</b>	<b>COMPANY</b>	
	<b>Parent Company</b>	<b>Separate-branded Internet Bank (where applicable)</b>
<b>Incumbents</b>	RBS Natwest Lloyds TSB Barclays Bank of Scotland HSBC Co-operative Bank	First Direct Smile
<b>Related Entrants</b>	Alliance & Leicester (Insurance) Abbey National (Building Society) Halifax (Building Society) Woolwich	Cahoot Intelligent Finance
<b>Unrelated Entrants</b>	Centrica TESCO Virgin	Goldfish Bank Tesco Personal Finance The One Account



## Chapter 6

	Technique	Literature (indicative)		Technique	Literature (indicative)
1	Accounting Rate of Return	Bacon (1992)	38	Process quality management	In: Lincoln (1990)
2	Analytic hierarchy process	Saaty (1980)	39	Quality engineering	Hochstrasser (1993)
3	Application benchmark technique	Powell (1992)	40	Real Options Valuation	Dixit & Pindyck (1995)
4	Application transfer team	Lincoln (1990)	41	Monte Carlo Methods	Razgaitis (2003)
5	Automatic Value points	Lincoln (1990)	42	ROI	Brealey & Mayers (1988)
6	Balanced Scorecards	Kaplan & Norton (1992)	43	Requirements costing technique	Joslin (1977)
7	Bayesian analysis	Kleijnen (1980)	44	Return on Management	Strassmann (1990)
8	Bedell's method	Bedell (1985)	45	Requirements Costing technique	Joslin (1977)
9	Buss's method	Buss (1983)	46	Schumann's method	Van Irsel et al. (1992)
10	Benefits-risk portfolio	McFarlan & McKenney (1983)	47	SESAME	Lincoln (1986)
11	Benefit assessment grid	Huigen & Jansen (1991)	48	Seven Milestone approach	Silk (1990)
12	Breakeven analysis	Sassone (1988)	49	Strategic application search	Shorrock (1990)
13	Boundary value	In: Farbey et al (1992)	50	Strategic option generator	Wiseman (1985)
14	Cost-Benefit Analysis	King & Schrems (1978)	51	Systems investment methodology	Lincoln (1986)
15	Cost-Benefit Ratio	Yan Tam (1992)	52	Simulation	Kleijnen (1980)
16	Cost displacement / avoidance	Sassone (1988)	53	Socio-technical project selection	Udo & Guimaraes (1992)
17	Cost Effectiveness Analysis	Sassone (1988)	54	Systems dynamics analysis	Wolstenholme (1992)
18	Cost-value technique	Joslin (1977)	55	Systems measurement	Sprague & Carlson (1982)
19	Cost revenue Analysis	In: Farbey et al. (1992)	56	Time savings times salary	In: Sassone (1988)
20	Critical success factors	Rockart (1979)	57	User utility function assessment	In: Powell (1992)
21	Customer resource lifecycle	Ives & Learmonth (1984)	58	Value analysis	Keen (1981)
22	Decision Analysis	In: Powell (1992)	59	Ward's portfolio analysis	Ward (1990)
23	Delphi evidence	In: Powell (1992)	60	Wissema's method	Wisseman (1983)
24	Executive Planning for Data Processing	In: Lincoln (1990)	61	Zero-based budgeting	Zmud (1984)
25	Functional Analysis of Office Requirements	Schafer (1998)	62	Value at Risk (VaR)	Holton (2003)
26	Game-playing	In: Farbey (1992)	63	EVA	Savarese (2000)
27	Hedonic wage model	Sassone (1988)	64	ENPV	Scarso, (1996)
28	Information Economics	Parker et al (1989)	65	NPV-q	Luehrman, 1998
29	Investment Mapping	Peters (1988)	66	FAP	Lefley (1997)
30	Investment Portfolio	Bergout & Meertens (1992)	67	SD	Shenhar & Dvir (1996)
31	Information systems Investment Strategies	In: Lincoln (1990)	68	DMP	Maltz et al. (2003)
32	Knowledge-based systems for IS evaluation	Aragwal et al. (1992)	69	4P	Renkema (1998)
33	MIS utilisation technique	Powell (1992)	70	Virtual Process Measurement	Nissen, (1994)
34	MOMC	Vaid-Raizada (1983)	71	MAPI	Meredith & Sureshi (1985)
35	Options Theory	Dos Santos (1991)	72	COCOMO	Nissen, (1994)
36	Potential problem analysis	In: Powell (1992)	73	Portfolio Analysis	Silk (1990)
37	Profitability index	Bacon (1992)	74	Risk-adjusted rate	In: Razgaitis (2003)

**Table B.6.9: List of IT investment appraisal techniques (compiled from Renkema, 2000; Irani et al., 1997; Nissen, 1994; Razgaitis, 2003)**

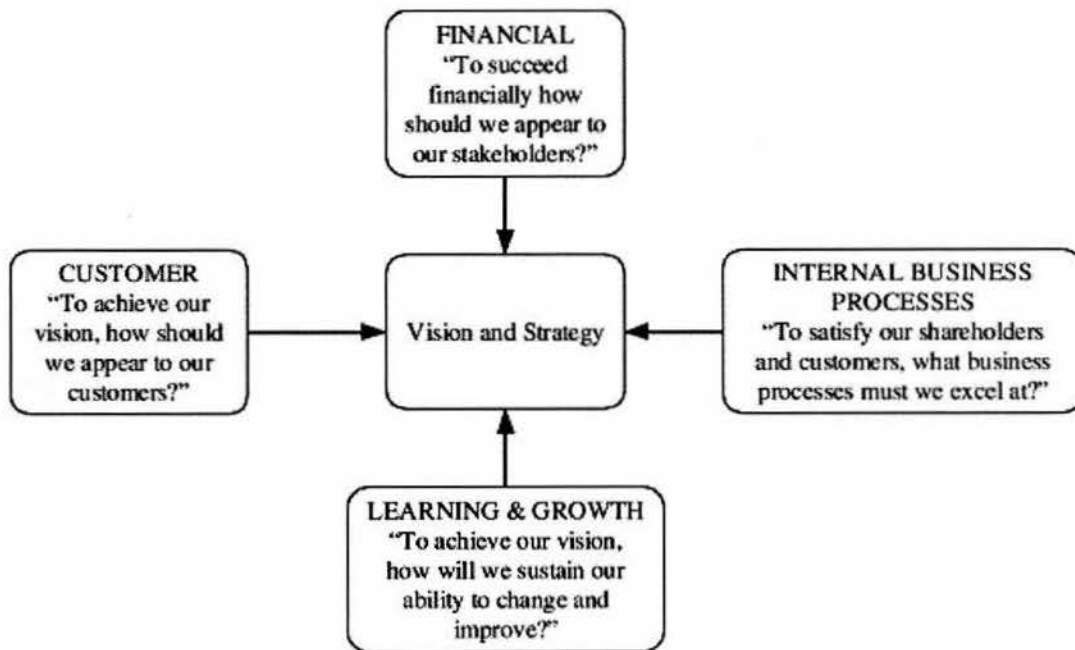


Figure B.6.5: The Balanced Scorecard method (Kaplan and Norton, 1996)

### Supplementary interview quotes

1. " ...And yes there were specialised models and methodologies to calculate NPV or IRR and so on, but as you know yourself, you can fudge those numbers to present any answer you want. And with a plausible set of numbers, and IT resource available, you can get it out ...So you were, to some extent, telling a story in getting approval to implement something like this..." (1.2, §36).
2. "... what tends to happen is that [the Finance manager] will be brought-in on a sort of consultancy basis to say, "What should we be doing? What things should we be looking at? What things do we need to measure? This is what we're going to do". Pick out several sensitivities; what were the major issues, what is the impact on income and expenditure...." (1.4, §38)
3. "...we take a number of projects, do a cost-benefit on them – mostly {focusing} on the costs – and at that stage, each of these areas will probably make a presentation to our Executive at a very high level, where they say "this is our problem of work; this is what we think it's going to cost, and this is what we think the benefits are going to be"..." (1.9, §28)
4. "...So, in terms of the techniques that are used, one of the things that I've seen in the past, is that the whole process, we are constantly revising it. We have a focus group that meets... at the moment we meet every two weeks to review the change management process. And its entirety is to feed back improvements. We've also increased tremendously the rigour around cost management within projects; once a budget is assigned, we manage against the budget..." (2.5, §38)
5. "...As soon as you start getting down to itemising costs and income, what you're actually doing is demonstrating that you actually understand what it takes to deliver the product or the service or the investment, and that in itself is part of the learning process. And then what you have is a Finance function that is actually validating that that there is a process in place...[ ]...a thing which is really strong within Financial Institutions as part of financial control and project sign-off, are the authority levels that are delegated down the hierarchy, and therefore, depending on your financial analysis and so on, who can actually sign-off a project. That is actually of fundamental importance to the long-term protection of the bank, so far as committing expenditure and the risks that your projects are generating. (1.7, §15)
6. ".....we've been discussing about things not being particularly financially attractive, but people keep wanting them to be done for a certain reason. Politics can really kick in there in two ways: One, they will lobby very senior guys at the Bank so if you get very senior Directors of the Retail Bank who really want to do something that looks unattractive, they will go to [the CEO] and try to sell that in their own classic negotiating ways..." (1.8, §55)
7. "...the top people at the bank will agree on what they're going to spend on IT for a year. There's some calculation but I don't know what. Then you've got this pool of IT resource, which has to be divided across our core initiatives. So, you have to rank these core initiatives, and the easiest way to rank them first-off is to stay with the financial benefit, estimate your costs and forecast benefits. If you get a really good ranking, then the discussion can begin..." (1.8, §47)
8. "...Our strategic driver, which was driven by market perception, was that we get profit month on month by the end of year three; now that very much drove all of our decisions over the last year in terms of what projects we do and what projects we don't do... [ ]... we have to take care of that, but we also have to make sure that any project that was carried out and any effort that we made needed a quick ROI; projects based on a longer term investment probably wouldn't get the same notice because of the need to break even. ...." (2.4, §64)
9. "...in terms of that of the numbers are going to stack up, we were forced with our projects and then come to that stage; but if it ever came to a stage where the business

- believed in a project but Finance thought that it wasn't commercially viable, we had to have some sort of arbitration to figure out which advice do we follow..." (4.2, §36)
10. "...probably did cost quite a bit and it had Executive approval; that's why when it was delayed, it was quite political. But on related projects, on which I spent quite a bit of money without actually going through an investment appraisal process, it was seen as 'we must do it' and it was this kind of quick and dirty things and there will be benefits..." (7.2, §31)
  11. "...if you're looking at a project, we would consider the NPVs and IRRs, the profit and ROI, we would consider all of those things, and that those have been there, but you're always looking at what this is going to do for shareholder value and trying to quote that into 'if you built this business or this project to help delivering a new business effectively, what's the value of that business to analysts?...' (3.1, §44)
  12. "...there are some politics to it as well; the political structure of the organisation. ... the tendency will be to inflate their idea of what the benefits will be, and perhaps not to fully consider what negative impacts there will be...[...there's the political aspect of individuals competing with other individuals for that scarce resource; and the way to do that is that they tend, as I say, to promote a bigger and bigger NPV for their project. From my perspective, people have come to me with business cases saying, "If we invest 3m now, we will be delivering 250m in three years time". You know, I say to them "this doesn't happen; you don't get that..." (1.4, §10)
  13. "... the other thing that we rely on is the bit of reality on the part of the sponsor, to say "well, if I am going to the table to say that I believe my initiative ought to be funded as opposed to somebody else's initiative, then I am going to beef up my business case to make it look much more effective..." (2.5, §22)
  14. "...in organisational structures people in product development can be fairly sure that they're doing the right thing and so on and that... you know... it's their job in some way that is central to it and therefore to set a very strong direction and let other people catch up and sort out the stuff behind them; so, I'm not completely objecting to that as it sometimes it needs to happen that way... but ultimately, you do need the other disciplines, like the Finance discipline, to be brought in at some..." (12.1, §12)
  15. "...for every 100 new loans we get, for example, at what point does it make it worthwhile for us to actually offer this product? And so, you know, it might be that 50% cannibalisation – which is maybe a realistic number – is the breakeven point. So, if we can reduce that cannibalisation anywhere near 50%, or get them to show or demonstrate how it can be less than 50, then I give you my backing..." [ ] "...The one area that I would have the greatest concern about is actually driving through the benefits of projects; actually delivering the benefits and actually being able to measure them. And that involves the sort of monitoring, the review afterwards as well; I've always found I the most difficult thing to get people to commit to..." (1.4, §12, §78).
  16. "..... for example; we would have a larger model that would sort of map, in a sense... just all the stuff I said before about it in looking at attitudes and that sort of thing and then again we would just do a bit of sensitivity analysis and use the best assumptions that we thought were the most realistic assumptions behind it. So we would use that behind and that just put it into that format for the purposes of passing through the Group - but it's the drivers that are behind what numbers that would be input into there that would be tested as such and see if we have the best option (1.6, §33)
  17. "...I think, one of the key things that we highlighted was that one of the things we were not doing is delivering the application as a standalone application. What you're actually doing is that you're trying to drive customer behaviour..." (5.1, §25)
  18. "...Do 3 online usage sessions equal one phone call? Well, you can't make that assumption. You can go with 'if they go online and make a transaction, then that is a phone call'. So, even though we've got more transactions from fewer users, we have to correlate this with the telephone, because from a customer's point of view, this is what they wanted to do..." (5.2, §38)
  19. "...the way banks are regulated are at two levels: One as individual legal entities; within that we will have things like ...[ ]... a host of other Group companies. Each one of those legal entities will be required to maintain capital ratios at a level. And what they'll have to do when the FSA apply a target level, a threshold, which is a few points above the



*statutory minimum; and depending on the stability or the robustness of the respective institutions, they will set levels which will not be a level playing field for all banks. So, you'll have sort of A Graded bank, B Graded bank and all the like. Within a Group, ... [ ]..., also, when they consolidate the financial position of all of the trading entities, they must also maintain a Group ratio. So what you have is that all ratios are operating at those levels. Typically, business units will actually span across legal entities..." (1.7, §9)*

Table B.7.10: Most pertinent research findings by thematic area (Indicative references to interview material are provided)

	Theme 1	Theme 2	Theme 3	Theme 4	Theme 5	Theme 6
	Establishment of TIDM processes and their applicability	The perceived importance of technological implementation	The development and dynamics of expert groups	Organisational structure and built-in hierarchies for decision-making	The influence of wider economic cycles	The role of knowledge and learning in TIDM
Conclusion points	Decisions mostly carried out on Strategic grounds (1.3, §9, §11; 1.7, §9, §13; 1.8, §47)	Financial Appraisal is done on standardised assumptions, largely based on business predictions (1.2, §44; 1.3, §37; 1.4, §10; 2.4, §22; 3.1, §36; 3.2, §48; 5.1, §43)	Expertise largely driven still from traditional banking culture. (1.3, §25; 1.8, §31; 2.5, §21)	Large organisations are more hierarchical - slower decisions (1.6, §30, §35; 1.8, §33; 3.1, §6; 4.1, §56-57; 5.2, §16)	Changed perceptions of IT valuation since the 2000 decline. (1.1, §4; 2.1, §32; 1.7, §13; 1.8, §8)	KM is seen as something that needn't be formalised (2.1, §57; 3.2, §12, §23; 5.1, §54; 6.1, §82; 10.1, §101)
	Documented processes are complex and highly detailed (1.8 §19; 1.4, §12, §38; 1.6, §35)	Uncertainty is treated as risk - simply built in as a necessary evil (1.2, §44; 1.5, §37; 1.6, §46; 3.3, §41)	Customer-end expertise considered most pertinent (1.1, §26; 1.2, §62; 1.3, §27; 9.1, §52)	Silo approach is most often visible in TIDM procedures (1.9, §6; 3.2, §45; 4.1, §26; 5.2, §16, §56)	Finance has upgraded role since dot-com bust, but more as justification (1.7, §15, 35; 1.8, §31; 2.2, §26;)	PIR not a learning device but simple checking mechanism (5.2, §8; 6.1, §46; 7.2, §22)
	Processes involve Finance as one of the key elements (1.8, §31, §33; 1.9, §28; 1.3, §21; 1.6, §27)	IT investment is treated differently from different experts (1.8, §31, §33, §51; 2.1, §32; 4.1, §44)	IT expertise not that pertinent anymore due to outsourcing capability (1.1, §16; 1.2, §62; 1.5, §57; 1.9, §16; 4.2, §42)	Finance often used as bottleneck for candidate technology propositions (1.3, §21; 1.8, §31; 1.9, §28; 3.3, §28)	More rigour used as persuasive argument after the dot-com bust. (1.8, §31; 2.4, §52; 3.1, §33; 3.3, §8)	Codification of knowledge considered important but active KM is far from reality. (1.9, §44; 2.1, §66; 3.2, §23)
	Processes follow group-wide directives (1.4, §26; 1.7, §43; 3.3, §34; 2.5, §18)	Spillover effects are not taken into account in measurement (2.2, §30; 2.3, §28;)	Prevalence of new hybrid Marketing and IT-savvy, business-minded experts. (1.5, §57; 2.2, §62; 5.1, §55; 6.1, §76)	Structures in pure-plays much flatter & technology – centric (3.1, §6; 3.2, 45, 47; 9.2, §25)	Reporting drives appraisal at the PLA level. (1.8, §33; 2.4, §64; 3.2, §12, §24)	Reporting knowledge assets is seen less important at the moment (1.9, §42; 2.1, §66; 2.5, §54; 10.1, §101)
	Processes also serve Reporting structures (1.3, §21; 1.5 §12; 1.6, §42; 2.1, §57; 2.3, §28, §29; 2.4, §64; 3.2, §12)	No IT-specific methodologies are used (1.4, §22-24; 2.1, §55; 2.2, §54; 3.3, §49; 12.1, §34)	The evolution of expertise is dynamic due to job mobility. (1.3, §70; 3.2, §50; 4.1, §50; 5.2, §10)	Hierarchical levels dominated mainly by traditional quantitative experts (1.3, §21; 5.1, §40)	Rationalised no-brainers through more rigorous processes and accountability. (2.5, §52; 1.7, §13; 5.1, §12-14)	
	Processes for project prioritisation driven by Finance (1.9, §28, §10; 1.2, §44; 1.3, §19)	No attempt to use more sophisticated Financial or other quantitative techniques (1.2, §42; 2.3, §40; 3.3, §49; 4.2, §78)			Changed perception of IT significance towards milder expectations (1.1, §28; 1.2, §12; 1.4, §50; 1.7, §13)	
	Support from the top is <i>the</i> crucial factor (5.1, §40; 5.2, §30; 7.1, §67; 9.2, §51)	IT largely used as instrument for political advocacy through TIDM. (1.4, §10; 1.7, §21; 1.8, §55)				
	Business sponsor accountability used as safeguard (1.2, §35; 1.9, §34; 2.3, §16; 2.4, §22; 5.2, §22; 8.1, §52)					
	PIR rarely done (firm does not devote resource) (5.2, §8; 6.1, §46; 7.2, §22)					

**Table B.7.11: Interviewees' current and past organisational positions and their educational / professional backgrounds.**

<b>Code</b>	<b>Position</b>	<b>Expertise</b>	<b>Background / Past positions</b>
2	Head of Strategy & Research – E-commerce & Internet	Banking	Product Manager
2	Retail Banking Director	Economist,	Public Policy - Academic
2	Decision Support Manager - Retail Finance	Accountant,	Decision Support Manager - previously in Insurance
2	IT Security Consultant	IT	security consultant / security management
2	Retail Direct Finance - Investment Appraisal	Accountant	Finance, P&L management
2	IT e-commerce Investment Appraisal	Accountant, Business analyst, Systems Programmer.	IT project manager
2	Retail Direct Strategy and Planning	IT	branch EDP
2	MIS - Group Finance	MIS – IT	data warehousing / IT implementation
10	Finance Director	Accountant, MBA	commercial property financing, corporate finance, M&A, Business Strategy
10	IT & Business Design Director	MIS – IT	IT manager / Business Finance
10	Head of Applications Development	IT developer	corporate banking IT - Internet Banking development
10	Head of Business Design -Head of Sales & Service	IT – Marketing	Customer care / IT
10	Change Management	Banking	Change management / process re-engineering
5	Head of Commercial Management, Digital Distribution	Banking & Finance	corporate finance
5	Finance Team	Actuary	actuarial technical work / marketing / financial evaluation
4	Associate Director of Corp. Banking	Banking, MBA	branch banking / corporate banking / customer relationship
4	Associate Director, Knowledge Management, Corp. Banking	Banking, then IT	Banking IT manager, IT systems / KM
8	E-commerce Development	Marketing. MSc in Business	e-commerce marketing analyst / business analyst
11	Internet Sales	Chemical Engineering / Schoolteacher	Training, HRM, Internet Sales
6	Store Marketing Manager	Marketing	Supermarket marketing, financial product marketing
6	Credit & Risk	Electronic Engineer, MBA	Finance, Credit scoring, fraud prevention, Risk mgt
7	Business Analyst	Business Studies, MBA	e-business strategy / tech strategy / tech evaluation
3	Head of Retention (British Gas) / Finance Director (Goldfish)	Finance - Consultant	FD in British Gas Fin Services
3	Manager of IT Finance	Finance	Finance roles throughout
9	Retail Strategy Manager	Mechanical Engineer - corporate mgt training, MBA	consulting, change management, Strategy
1	Investment Banker	Banking	Investment Banking
12	Technology Director	Mathematics, Operational Research	Mathematical modeling, OR in brewing industry, derivatives, trading systems.